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ABSTRACT

This report of an assessment of vocational and technical education needs in South Carolina is divided into seven sections. The introductory section briefly describes the assessment model used in the study. Section 2, National Overview, provides background information of national significance. It includes an analysis of studies conducted to determine the future of vocational education, an analysis of current issues in vocational education, an examination of federal legislation impacting vocational education, and reviews nine Gallup Polls on education. The national overview concludes with a section which presents statistical data relating to vocational education in the United States. Section 3 describes the context in which vocational education functions in South Carolina. More specifically, this section describes the state's general and school population, the organization and governance of vocational education, the employment outlook, and state legislation affecting vocational education. The fourth section provides a system overview that describes input variables, process variables, and output variables. The fifth section reports the findings and recommendations resulting from a survey of vocational needs in South Carolina. Section 6 presents a synthesis of the data relating to areas such as public attitude, advisory committees, program relevance, program effectiveness, and professional development and teacher education. The assessment survey instruments are appended. (LRA)

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Assessment Of Vocational And Technical Education Needs In South Carolina

DEPARTMENT of EDUCATION
SOUTH CAROLINA

CE 024 083

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PREFACE

This document was prepared by the Vocational Research Coordinating Unit of the South Carolina State Department of Education in accordance with the Office of Vocational Education's "South Carolina State Plan for Vocational-Technical Education: FY 1978-82." The overall goal of vocational research for program improvement during the five-year period covered by the State Plan is "to advance or improve vocational education in South Carolina by serving vocational educators through the coordination and monitoring of research projects and activities." The intent to conduct a needs assessment to help meet this goal is expressed as Objective 1 of the Research Annual Plan for FY 1978: "To use available research funds to identify and prioritize the needs, problems, and concerns of the South Carolina vocational educators."

The data utilized in this assessment were obtained through surveys conducted under contract and through analysis of existing data and information available at national and state levels. The reports contrived herein have been prepared by Department and other state agency staff or by contracted consultants.

INTRODUCTION

In planning and coordinating this assessment, the Vocational Research Coordinating Unit (VRCU) has sought to involve individuals who have the necessary expertise to accomplish the many and varied activities required and who have a thorough knowledge of the state's vocational education system. Since the term "vocational education" encompasses much more than the Office of Vocational Education and the local educational agencies it serves, it became evident that the direct participation of all the state, federal, and local agencies involved would be unfeasible, if not impossible. Therefore, the VRCU chose to work directly with an advisory committee comprising a limited number of key individuals who either had the information needed or had access to it through their knowledge of and experience with other people and organizations. This committee was formed in June, 1977. and was called the Vocational Education Needs Assessment Coordinating Committee. It included representatives from the State Department of Education, the State Board for Technical and Comprehensive Education, the State Advisory Council on Vocational and Technical Education, and a local school district.

Upon the suggestion of the VRCU staff, the Coordinating Committee recommended that the needs assessment design be based on a model developed by the Office of Planning and used in a statewide assessment of educational needs during 1975-76. The Committee also recommended that the assessment be a comprehensive one, including not only an assessment of vocational education (secondary) programs, but using, when possible, similar data and information on TEC (post-secondary) programs, Comprehensive Employment Training Act (manpower) programs and vocational training programs offered through other state agencies. Because the Office of Vocational Education was already required by the U.S. Office of Education to complete an assessment of Career Education in South Carolina during FY 1978, the Committee agreed that it was not feasible to attempt to include Career Education in the Vocational Education Needs Assessment.

The Office of Planning's assessment model focused on the measurement of the gap between existing and desired conditions, as stated in the formula:

WHAT SHOULD BE – WHAT IS = EDUCATIONAL NEEDS.

The model requires the completion of four major steps:

1. Data collection
2. Synthesis of data
3. Discrepancy analysis
4. Categorization of needs

This design was modified as appropriate to accommodate the specific needs of the Office of Vocational Education. The Committee recommended that the following design be used for the assessment:

I. National Overview
    A. Futures Studies
    B. Educational Issues Consensus
    C. Federal Legislation
    D. Public Opinion Poll
    E. Statistical Data

II. State Context

   A. Population and Economic Characteristics
   B. Organization and Governance of Vocational Education
   C. Economic and Employment Projections
   D. State Legislation

III. System Overview

   A. Input Variables
   B. Process Variables
   C. Output Variables

IV. Perceptual Overview

   A. General Public
   B. Business and Industry
   C. Students
   D. Educators

V. Synthesis of Data

   A. National Trends
   B. State Trends
   C. Data Summary
   D Assessment of Vocational Education Needs

The Coordinating Committee worked with the VRCU staff in June, July, and August, 1977, in modifying the needs assessment model and in developing a Request for Proposals (RFP) to conduct the surveys necessary for the perceptual overview component. The RFP was completed, along with a distribution list and a set of criteria for evaluating the proposals received, in September. It was released on September 12, and required that all proposals be received by October 21. Of the eighteen firms that received the RFP, seven submitted proposals. A sub-committee comprising six members of the Coordinating Committee read the proposals, rated them according to the criteria/point system established earlier, and presented the rankings of the seven, based on average points assigned, to the Director of the Office of Vocational Education. The top ranked proposal, which was the Committee's actual recommendation, was subsequently approved by the Director of the Office of Vocational Education, the Deputy Superintendent for Instruction, the State Superintendent of Education, and the State Budget and Control Board, and on November 18, 1977, a contract was initiated by the State Department of Education with National Evaluation Systems, Inc. (NES), of Amherst, Massachusetts.

Under the terms of the contract, NES agreed to design the four surveys required; to select statistically valid samples from three of the four target groups; to administer three of the four surveys; to edit and process all survey responses; and to prepare an interpretive report on the survey results, including a section in which responses to items common to all four surveys are compared and the firm's general conclusions and recommendations regarding the survey results are discussed. Subsequent contracts with NES provided for: the development and pre-survey distribution of a question-and-answer brochure, designed to provide information about the survey and to stimulate interest in it; the production of a summary report describing the results of the survey in a digest format; and the production of a slide-tape program describing the results of the survey for group presentation.

The sample from the business and industry group was drawn from the data files of the South Carolina Employment Security Commission (ESC). Because state law prohibits the disclosure of these files to anyone outside ESC, the Director of the Office of Vocational Education requested the assistance of ESC in conducting this survey. ESC complied with this request by agreeing to: design a sampling procedure and select a sample of

2,500 firms; address and mail out survey forms (including one-follow-up mailing); screen responses and delete names of respondents; tally responses and prepare a response analysis report and a description of the sampling procedure used. Once the responses were screened and made anonymous, they were sent to NES for processing and interpretation. By providing this assistance, ESC made it possible to reach a target group which otherwise would have been only partially accessible and only then by a costly, time-consuming, and less than satisfactory method.

The NES final report on the four surveys appears in its entirety in this document as Part IV, PERCEPTUAL OVERVIEW, and is highlighted in Part V (SYNTHESIS).

Many people, including the Coordinating Committee members and members of their respective staffs and organizations, as well as others from various state and local agencies, have made direct contributions to the assessment. The VRCU staff was responsible for coordinating the entire effort, which included the editing of all contents of this document, as well as the actual design, production, and distribution of the document itself. This claim for credit must be accompanied by an acceptance of responsibility for the contents, which are, as far as human capability allows, factual, accurate, and based on the latest and soundest information available.

NATIONAL OVERVIEW

The purpose of this component is to provide the assessment with background information of national significance. It includes an analysis of studies that have been conducted to determine the impact of the future on vocational and technical education and what future trends are indicated. It continues with an analysis of current issues in vocational and technical education, as indicated by the professional journals and by professional educational organizations, which suggests a consensus of what the major national issues are. An examination of federal legislation impacting both directly and indirectly on vocational and technical education indicates priorities from that viewpoint, and a review of the nine Gallup Polls on Education which have been conducted annually since 1969 gives some insight into national public opinion toward vocational and technical education. The National Overview concludes with a section which presents statistical data relating to vocational and technical education in the United States.

During the preparation of this component, the aim was always to present information germane to vocational and technical education. But it was not always possible to do this, because many of the educational issues, topics, and trends found to be of national significance were broader in nature and tended to reflect the concerns of educators in general. This, of course, does not mean that this information should not be here, but that its value is not restricted to vocational and technical education.

FUTURES STUDIES

This section of the needs assessment is concerned with the synthesis of a national overview of future trends which will probably have direct, and in some cases, dramatic implications for vocational education. Although the trends described in this summary are in a sense predictions of the future, they are by no means based on mere intuition. Instead, they are based on a combination of human reason and mathematical models, computer technology, demographic and economic studies, and other sophisticated techniques for projecting future trends. Futurists attempt to describe probable directions which society will take in the years to come.

Obviously, not all futurists agree in their forecasts. Some are optimistic about the United States' ability to adapt to the rapid changes approaching, while others express a pessimistic concern that things will not work out without much difficulty. Also, futurists cannot usually foresee rapidly escalating problems like wars, or aberrant political crises like Watergate. Thus, their conclusions must always be taken as tentative, and planners using their predictions must proceed with caution.

This synthesis attempts to outline the broad areas of agreement among futurists which appear to have relevancy for education, specifically vocational-technical education. The trends outlined here are presented on the assumption that the United States, despite the rapid changes confronting it, will face an orderly evolution of society rather than experiencing any unknown national catastrophe, such as major social upheaval or economic collapse. They are by no means the only factors which will affect our way of life, and any one trend could be altered by any number of variables. It is for these reasons that this material should be read with a critical eye, and the realization that, for futurists and planners, the important thing is the broad, general outlook rather than the specific prediction.

Obviously, the main trend relevant to vocational and technical education is the exponential boom of technology. Tremendous growth in the field of technology will continue, with many rapid changes in the relevancy of many technical occupations. Although only one in five of the jobs which will become available through 1985 will require a college degree, there will be a 50% increase in the number of technicians and professional workers, accompanied by a decrease in the demand for laborers.[1] Some futurists add that managers who lack preparation in math and science may soon face unemployment, along with workers replaced by automation. The increasing importance of rapidly changing technologies in energy, communications, transportation, medicine, and computer science is also mentioned by many futurists.

But technology is a two-edged sword; as futurist Felix Robb comments:

> Without technology, our major cities could not have been built. With technology, though, huge metropolitan areas are rapidly becoming uninhabitable because of problems such as air pollution, inadequate waste disposal, water and power shortages, choked transportation arteries, crime, and unemployment. The urban way of life was supposed to be the crowning jewel of civilization. Instead, these jungles of concrete and steel face unprecedented crises in their governance and operation. Again, is technology at fault, or must blame be assigned elsewhere?[2]

Along with jet propulsion, computers, atomic energy, laser beams and space travel, the technology boom has produced environmental pollution, displacement of people, and the actual power to destroy civilization on earth.

The burgeoning of technology is, of course, not the only cause of such dilemmas. In many cases, technology has expanded precisely to correct these problems, and has contributed significantly to their abatement. A good example is the relationship of technology to the energy problem. Because our technology is so vast and sophisticated, it consumes enormous amounts of precious natural resources in order to sustain itself, and thus contributes to the problems of shortage. At the same time, however, technological breakthroughs are enabling people to use conventional resources more efficiently and to discover new, more plentiful sources of energy for the future. There is widespread agreement among futurists that technical knowledge is the most critical factor for tomorrow's world. The key question facing society is not whether technology will increase, but how.

Other trends of far-reaching importance must also be considered in light of the technology boom. The conditions of environment are among the most significant. Energy shortages, particularly in the petroleum and natural gas industries, are expected to continue. These resources are already in short supply, and, if the present rate of consumption increases, they will not last much longer. Obviously, this condition will have profound effects on the American way of life. For instance, agriculture and agriculture-related production are highly dependent on the availability of petroleum and natural gas. As these resources are exhausted or severely reduced, and new energy sources are not developed to replace them, our ability to feed ourselves (or other people in the world) will be severely diminished.

Because of these shortages of raw materials, the United States will be forced to become a re-cycling, rather than a throw-away society.[3] Consumption and rapid expansion are necessarily becoming things of the past for many industries. Several of the raw materials we now consider essential will be depleted before the end of this century, and plans must be made to develop workable alternatives to this potential disaster.

Problems of environmental upkeep, pollution, the continued demand for fresh water, and other conditions affecting the ecological balance will continue as critical issues in the future. As the shortages and pollution become acute, futurists predict that Americans will be more and more concerned about the general quality of their environment. Some argue that this concern will keep environmental interests in continual conflict with business and industry, while others predict that saving the environment may become a rallying point, helping to unify the country in an attack on the common enemy of all, pollution.

The United States economy will inevitably be altered by the changes in environment and technology. But many futurists predict that, with increasingly gentle forms of governmental stimulation of the economy, inflation will eventually be stabilized at about 4% per year, and the economy will be characterized by slow but steady growth.[4] This rather optimistic view is supported by many economists who have indicated that shortages of many basic and raw materials and projected slower growth in the labor market will result in modest (4%) growth in the GNP over the next decade.[5]

Unemployment should stabilize at about 5½%, say many futurists, and, as mentioned above, this should contribute to an acceptable rate of inflation with modest growth in the GNP. Several economists are of the opinion that, with unemployment at 5% to 5½% of the labor force, there will be about as many people looking for work as there are jobs available. The discrepancy can be explained by the fact that there are jobs which demand skills for which there are not enough trained individuals to fill them and that there are numerous trained individuals who will not take a job for which their specific training is not a requirement. This points to the need for more efficient and effective training and manpower services.

Underemployment may be of more concern to society than the unemployment rate in the future. It is estimated that over the next ten years the supply of college graduates will increase much faster than the number of jobs which require a college degree.[6] The United States Department of Labor projects that, by 1985, there will be 13.1 million college graduates seeking work below their level of training.[7] But James O'Toole, a noted educational futurist, estimates that, even now, around 80% of all recent college graduates are underemployed.[8] As more and more college graduates are forced to take jobs below their level of training, they will invariably force other trained workers to even lower levels, thus causing intense competition for available jobs. Skilled workers may then become frustrated in their search for jobs which meet their individual expectations.

The bulk of the new jobs of the future will also be service-oriented, rather than in manufacturing and production. The need for services is expected to grow tremendously, but most service-oriented jobs will require skilled and middle management personnel, with only about 5% of them in the unskilled area.[9] Certainly the role of education will be dramatically enhanced by this development. The increased need in the work force for skills, especially technical skills, will require that workers of the future be provided with some means of upgrading their skills and knowledge in order to keep pace with the increasingly rapid changes. Knowledge and the means of obtaining it will become more valuable commodities, and the public school system will be expected to provide leadership in this area.[10]

Along with the profound shifts in technology, the environment, and the economy, there will be many important social changes in the United States. Perhaps most important for education and employment outlooks, the birthrate in the United States will be generally declining, despite several slight, short-term increases. However, the rest of the world's population will continue to multiply at a tremendous rate. The median age of the U.S. population is expected to increase over the next ten years by six years, to 34.8 years.

The population age 75 and older will grow at 2½ times the rate of the population as a whole, and the dependency ratio (the number of workers per retired person) will drop from 4.6 to 3.5.[11] The minority population will decline less rapidly than the white population, however, and proportionally more young people of working age will be from minority groups.

One probable result in the overall birthrate decline is that there will be an increasing shortage of young workers over the next 25 years. As retirement ages rise and social security laws are changed, more older workers will remain longer in the work force. The work force composition will also be significantly altered by the presence of a large number of women. Over the last several years, the female U.S. labor force has risen by 16.5 million, an increase of 80%. By 1985, the Bureau of Labor Statistics predicts that there will be more than 45 million women in the U.S. work force. Most futurists predict that the resistance that women are encountering in securing employment in non-traditional fields will decrease, and that by 1985 the male population in the work force will have declined by as much as 7½%.[12] If we add to this situation the increased number of minority workers and workers who are handicapped and disadvantaged, it becomes obvious that there will be intense competition for the available jobs. Many futurists predict that this will lead increasingly to conflicts between these groups and add to the trend towards the establishment of a *de facto* class society in the United States.

Other social problems will inevitably arise as women, youth, minorities, older workers, and the handicapped and disadvantaged compete among themselves for jobs, public attention, and federal resources. Futurists are divided about many of the implications of this increased conflict among special interest groups. A good example of the diversity of opinion is the predictions of futurists concerning race relations. The most optimistic predict that race problems will improve or be eliminated by the year 2000, and that more money will be spent on social problems than on national defense. Some more cautious futurists agree, arguing that, as a result of this concerted effort and interest, equality of opportunity will be "in greater practice in improving life for minority members allowing a greater number to advance into the mainstream of U.S. society."[13] Other futurists, however, are not so sanguine. They believe that there will be a decrease in the amount of public attention paid to people, especially members of minorities, who are long-term welfare recipients, members of the hardcore unemployed, and dwellers in urban "ghettoes." This will result in bitterness against the system and may produce an increase in violence. Responsible members of minority groups will then have to push even harder for their special interests, especially in the integration of schools, housing, and jobs.[14] Under these circumstances, many futurists predict that the battle among special interest groups will get worse over the next two decades, and that Americans' tolerance of differences and interest in their fellow Americans will lessen as the competition for public attention and assistance increases.

Social change will also have considerable effect on American family life. As the demand of the family for two or more paychecks increases, and as women continue to enter the work force in even larger numbers, there will have to be modifications in the traditional family structure, and many households will have working mothers as well as fathers. In addition to the pressures on family life caused by the absence of both parents during work hours, a great deal of stress will result as husbands and wives seek equal roles, and compete with each other for jobs and advancement. This trend, say the futurists, will be felt most strongly by professionally-oriented men and women. Consequently, divorce rates will continue to rise, and this will result in more single parent households, usually headed by the female. Thus, value training and upbringing techniques normally practiced in the home by parents will increasingly become the responsibility of other institutions.[15]

The constant increases in technology will phase out many old jobs and create new, but often entirely different, jobs to replace them. As cities become less attractive to industries and businesses because of high taxes, crime, and pollution, the industries and businesses will move to more outlying areas, whether suburban or rural. This decentralization will necessitate a more mobile work force, although transportation costs and the desire of families to establish roots in one area may restrict this trend to younger members of the work force.

Not all of the trends which futurists predict are so unpleasant as some mentioned in this brief synopsis. For example, many futurists see a trend towards shorter working hours and longer vacations, which will produce an increase in the amount of leisure time which workers can enjoy. Many predict that recreation will become a major industry, with the use of parks and playgrounds increasing by as much as 500%.[16]

Another, perhaps more important, result of the changes in American life which the future will bring will be an increased interest in the quality of work. Many futurists predict that salary or wages alone will not be as exclusively important to the skilled worker of tomorrow as they are today. Instead, people will be more concerned with their psychological well-being and self-fulfillment. Success will be measured more by the quality of people's lives and occupations rather than merely by the quantity of money they receive for their work. Some futurists foresee an increase of inner-directed attitudes, with much accompanying concern about fitting into society in comfortable and meaningful ways. With technology presenting new challenges constantly, and with more people becoming technologically trained, the futurists believe that more people will be "involved" with their jobs.

Major political changes will accompany the changes in technology, environment, economy, and society noted above. The influence of government, particularly the federal government, will increase greatly over the next several years. For example, federal support for education will rise from the present 10% to about 30% by 1985.[17] By 1985 we can expect an increase of one to two percent in the ratio of education costs to the GNP.[18] Today, the contribution of the states is six times that of the federal government. But this ratio will decrease in the future, freeing state money to be used for other demanded services. The result may be much loss of control of education to the federal government.

Taxpayer pressure on government will also increase sharply, as people begin to demand more for their tax dollars. The public's expressions of anger and frustration in the face of what many perceive as federal "give-away programs" will increase, resulting in the necessity for more accountability at all levels of public funding. The public's demand for tax relief may conflict with increased public demand for government services. California's recently passed Proposition 13, which restricts property tax increases, is a typical example. The state government maintains it will be unable to operate without increased taxes, and must instead cut back sharply on services. Yet the trend of relying on government to solve huge social problems and provide quality free public education is expected to continue, demanding dramatic increases in the number of government employees and agencies. These conflicts will probably intensify Americans' involvement in issues which concern the protection of the public interest and the rights of individuals. Further, if government fails to solve major social problems, particularly crime and poverty, the result will be an even greater decrease in public confidence in government.

The erosion of the tax base, the flight of the middle class, and the declining birthrate will also result, say some futurists, in the placement of large urban areas under the monetary wing of the federal government.[19] The problems of New York City will be repeated in other American cities. As they seek additional financial assistance, control of their affairs will increasingly shift to the federal government, and many services now taken for granted may have to be curtailed or eliminated.

It is not only public institutions which will receive increased government involvement. As business and industry continue to resist self-regulation, pressure from citizens' groups and special interest lobbies will probably cause an increase in government regulation of their operations. The increasing influence of the Food and Drug Administration, OSHA, and the Environmental Protection Agency, as well as many other federal agencies, indicates that this trend is likely to continue. Some futurists even predict that, by the year 2000, the national government will have seats on the boards of all large corporations.

The federal government's transfers of expenditures (payments for which no services are rendered, including social security, veterans' benefits welfare, grants to state and local governments, interest on the national debt, etc.) are expected to continue to increase, with the result that the government will have more and more influence on the distribtuion of private income.[20]

IMPLICATIONS FOR VOCATIONAL EDUCATION

The major trends indicated in the previous section will have profound significance for vocational and technical training in the United States. The following summary attempts to list the main points raised by futures studies which are relevant to this point.

It is quite apparent that the dramatic increases and constant re-direction of technology would place enormous emphasis on vocational and technical training, even if the other major factors listed by futurists did not exist. The technology boom will require expansion of some traditional areas, while other areas will become obsolete. Likewise, entirely new areas of study will probably have to be presented to students, as innovations are developed and implemented by business and industry. The constantly shifting needs of the labor market will become critical factors in planning for the future of vocational-technical training, and mere reliance on a steady core of "traditional" vocational subject areas will not suffice.

The concepts of "life-long education" and "open-ended learning" will become more critical to vocational-technical training, and should help schools to take into account the rapidly changing nature of technology and the future needs of workers to re-train several times during their careers. Adaptive skills will become imperative, and theoretical knowledge will be an essential complement to traditional "hands-on" training. The mastery of the basic skills of reading, writing, and mathematical computation will become even more essential to students who wish to compete for work. Doubtless, there will be a large increase in special remedial programs to provide these basic skills to students who do not possess them adequately when they reach vocational or technical education centers, unless the lower grades of school can do a better job in the future.

With the increased need of society for well-adjusted, "flexible," competent workers, the importance of career awareness and planning will increase, as well as the need for competent, comprehensive programs of guidance and counseling. Many futurists also emphasize the growing importance of on-the-job-training, work-study, and cooperative training programs, which will aid in helping people to select and pursue careers and in making closer ties between schools and employers. To some extent, these programs will aid in enabling older experienced workers to return to school in order to gain new skills or to retrain for new or different jobs as employment needs shift. The need for alternative forms of education will doubtless increase as conditions in the economy require it, especially with the rise in the median age. A shift in emphasis towards service-oriented occupational training will also be likely in vocational and technical institutions.

Recruitment of women and minorities, especially for non-traditional occupations, will become a high-priority goal for vocational-technical education, and these groups will be a very significant part of increased enrollments in vocational and technical institutions proportional to enrollment in other types of educational institutions. Vocational-technical enrollments will increase markedly in al program areas except agriculture and consumer and homemaking studies, which will decline as jobs and available federal funds for such programs are reduced.[21] As stated earlier, vocational-technical enrollments will increase in proportion to other educational enrollments; but there will still be a decline in the total number of students enrolled in all schools, because of the declining birthrate in the United States. As overall enrollments decline, elementary, middle, and high school closings and consolidations can be expected, resulting in a decrease in the number of teachers required.[22] This trend will be further aggravated as the public becomes increasingly unable or unwilling to support the high costs of public education through taxes. Thus, even though vocational-technical education will be greatly emphasized in the future, the perennial competition for available funds will continue to be intense.

Vocational-technical education, like many other public, tax-supported services, will be increasingly subject to the crossfire of public scrutiny and governmental regulation. Federal controls and guidelines, as mentioned earlier, will become stronger as the federal government assumes more funding responsibility. With this increased control should come many more responsibilities for the schools. Some of these, notably more provisions for the education of disadvantaged and handicapped students and increased attention paid to students with socioeconomic handicaps and other problems which affect learning, should have public benefits which will outweigh the probable costs, at least if these programs are run carefully and responsibly. Other responsibilities, particularly those which will increase "red tape," will doubtless cause rancor.

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This influence of the government, combined with increasing public scrutiny of the business of education, will impose many requirements upon the vocational-technical education system beyond those presently in effect. Certainly a consistent nationwide vocational-technical education policy must be developed in the near future, as well as a clear statement of mission and accomplishment on the state and local levels. The effectiveness of schools in providing students with academic and occupational "basics," career awareness, guidance and counseling, and job placement upon completion of training will be closely watched, and will have to be clearly documented with positive results. Similarly the equal-status cooperation of vocational-technical education with manpower programs, business and industry, and the other forms of public education seems mandatory. The National Association of State Vocational Education Directors has stated:

> We are convinced that vocational education and other manpower programs can be brought into a positive working relationship within one educational agency. We believe that vocational education cannot function outside public or private educational systems. We hold that other functions of education are or can be related to vocational education, including the performing arts, the humanities, foundation and basic education, special education, educational technology, research, development and dissemination, and higher education.[23]

Thus, the implications of the future for vocational-technical education seem many and problematic. Certainly the old, mistaken image of vocational-technical education as a "dumping ground" for academically deficient students and disciplinary problems must shortly expire. But the real test will come through the manner in which vocational and technical educators plan today to meet the future needs and inevitabilities outlined generally in this brief synopsis.

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EDUCATIONAL ISSUES CONSENSUS

The vast technological growth our country has experienced during the past decade and the social changes accompanying this growth have affected nearly every facet of American life. Such growth and change also demand that changes occur in our system of education and require educators to face the challenge of dealing with the problems and issues which accompany them.

Identifying the diverse problems confronting educators is no easy task; it would be naive to consider that a complete listing of key issues could even be compiled. However, by noting what the national professional educational organizations are saying and by examining the topics most frequently addressed in educational journals, one can identify many issues of major concern to vocational and technical educators.

Of the concerns identified, the most frequently occurring are school finance reform, collective bargaining, Title IX (sex equality), career education, education of the handicapped, community involvement, and accountability. Many other issues are mentioned within this report and are included in the accompanying charts, but the key issues noted above require some discussion.

SCHOOL FINANCE REFORM

The present system of school finance has been under constant review and continues to elicit educational research and legislative activity. As the cost of public education continues to climb, the burden placed on the taxpayer increases. Educators are faced with the problems of how to raise and distribute educational revenues and resources in a more equitable manner to assure that equal educational opportunities are provided to all children. They are concerned with the increasingly strict regulations and guidelines which must be followed in order to qualify for the funds necessary to support educational programs. Increased federal assistance to education has been accompanied by an increase in these regulations and guidelines; certain restrictions, notably local fund matching, often have the effect of actually reducing the relative amounts of federal funds used to support local public educational programs.

Traditional methods of raising and distributing revenues for public education have come under fire in the last few years. The use of property taxes as a source of educational revenues has caused many problems. These taxes have risen sharply in many areas, and property owners are becoming vocal in their discontent, as the overwhelming passage of California's "Proposition 13" indicates. Also, schools in poorer neighborhoods have been suffering, and citizens in these neighborhoods have been calling for more equitable education, and for reforms that spread tax money used for education equally over a city, region, or state. Policymakers will continue to explore alternatives for improving present methods of school financing.

COLLECTIVE BARGAINING FOR TEACHERS

Collective bargaining continues to be an increasingly important subject to educators throughout the nation. Through teacher unions and other organizations, teachers have expressed their concerns about many issues, such as teacher certification methods, class sizes, teaching loads, teacher evaluation materials, greater influence on policy-making, and salaries.

TITLE IX (SEX EQUALITY)

Six years ago, Congress passed Title IX of the Education Amendments of 1972, which prohibits sex discrimination in federally assisted education programs. Specifically, Title IX states:

> No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance.

The governing regulations of Title IX became effective July 21, 1976, and cover all aspects of sex discrimination in schools with regard to admissions, treatment of students, and employment. Title IX has had tremendous impact on all educators and especially on vocational educators. General education courses such as mathematics, English, and history are commonly made up of a representative male/female enrollment, while vocational courses such as cosmetology, plumbing, welding, and office occupations have had single-sex enrollments. Vocational educators are concerned with how to achieve compliance with Title IX in these traditionally male and female courses. Although vocational education courses have generally been offered on an open-door enrollment policy, Title IX in effect states that this policy of enrollment is not automatically acceptable. According to some interpretations of Title IX, such enrollment procedures have unintentionally resulted in sex role sterotyping and in *de facto* sex discrimination. The Education Amendments of 1976 complement the specific Title IX prohibitions of sex discrimination by including a mandate for the development of specific programs designed to overcome sex bias, sex role stereotyping, and sex discrimination in vocational education and the authorization for states to use federal funds for this purpose.

Vocational educators are under constant observation in their efforts to comply with these provisions and are acutely aware of the resulting pressures for their strict enforcement.

CAREER EDUCATION

According to professional educators and educational organizations, career education has received overwhelming approval and schools should give more emphasis to a study of trades, professions, and businesses in order to help students decide on their careers. While fewer students are going to college after high school graduation, the number entering the work force is increasing. Educators are aware of the information and exposure to the world of work that students need in order to make realistic and satisfying decisions on their future careers. Career education is also considered to be one of the most useful tools in eliminating sex bias, sex stereotyping, and sex discrimination.

Educators agree on the need for career education but are undecided on which grade level it should begin. While some educators say that emphasis on career education should begin with junior and senior high school, others insist that it should start earlier, at the elementary school level.

EDUCATION OF THE HANDICAPPED

Legislative activity toward providing acceptable and equal education for the handicapped has been increasing. As mandates for action in this area continue, educators have responded by developing programs and materials for the handicapped. This high-priority area has caused some problems for educators and has raised questions which must be addressed as they attempt to provide an equal education geared toward the needs of the handicapped.

Many educators believe that the needs of the handicapped can best be served in small classroom settings where individual attention and assistance can be provided. Another group disagrees with this concept because the students would have little, if any, exposure to students without handicaps, and would probably suffer from a neglected social development pattern. They suggest that "mainstreaming" – placing handicapped students in a regular school setting – would be more effective because it would help them to adjust to society and to develop behavior patterns which will increase their adaptability and employability. "Mainstreaming" is actively encouraged by the Education for All Handicapped Children Act, which stipulates that handicapped children must be educated by the "least restrictive alternative." Educators are faced with other strict federal guidelines and requirements for serving the handicapped. Physical and academic needs must be identified for each student and a continuous assessment of individual progress must be made. Many other services must be provided, such as special facilities and resource teachers.

Educators stress that additional funds will be required to provide an appropriate educational setting to meet the specific needs of each handicapped student and question whether local school districts can comply with new requirements if these funds are not made available.

COMMUNITY INVOLVEMENT

A trend toward community involvement in education has become pronounced in the past few years. This increased public interest in the schools is attributable to several factors. One of the main influences has been federal legislation mandating community involvement. Educators are required to promote the public interest in education through the establishment of local citizens' advisory committees. Public participation in education has been achieved in other ways, including informal public meetings, public opinion polls, community surveys, and more involved processes for determining local educational goals and needs.

Educators express varying attitudes toward increased interest and involvement by the public. As a tool for promoting public relations between school and community, many benefits from public involvement have been identified. Local citizens are more informed of the goals and expectations established by educators and have some knowledge of the organization and the processes involved in managing the public schools. As a result of this knowledge and understanding, educators have experienced increased public cooperation and assistance.

But increased public awareness has also developed problems for educators. One question asked is to what extent can the public be involved in the management process and decision-making. Educators are searching for a realistic answer to this question; most agree in principle with public involvement, but point out that the majority of the citizens in the community do not possess the expertise and knowledge required for responsible and intelligent participation of this kind. They feel that the answer lies in the development of appropriate procedures that will both foster public participation and strengthen the ability of citizens to play a responsible role in their decision-making involvement.

ACCOUNTABILITY

Accountability is a topic found in most professional education journals and discussed by many professional education organizations. Although the term "accountability" as a popular topic has received the attention of policy-makers in the form of numerous legislative enactments and has been in use for many years, it has no clear-cut, widely-accepted definition. Public pressure is mounting to make educators accountable for educational outcomes. There is also pressure to use management technology to improve public educational systems. One popular view of accountability holds that educators should be judged on the basis of student achievement, while another view expresses the notion that educators should be accountable for providing adequate educational opportunities, but not for outcomes. Federal regulations now require that an "accountability" report be provided as an additional responsibility of states receiving federal funds. Considering all of these complications, it is not surprising that educators want a common definition of the term "accountability." Decisions must be made concerning who is accountable, to whom, and for what.

The accountability issue has been the subject of much research and the cause of many innovations in curriculum development and instructional materials and techniques. Competency-based instruction has been cited as a means to develop a tool for measuring educational accountability. This opinion views accountability as the process of identifying the competencies students need to enter and survive in the competitive world of work, and providing these competencies in the public school system. If the educational system is delivering educational programs incorporating these competencies, then students are receiving an education that will prepare them for an equal opportunity to succeed in the world of work or to continue their education. According to this view, educators are held accountable for the provision of such educational opportunities.

Open education, individualized/self-paced instructional materials, and minimum competency examinations are terms and methods some educators are using in attempts to solve the accountability issue. Although the concept of accountability continues to attract the attention of many educators and legislators, some feel that the word represents just another complex fad which will eventually fall into disuse.

Vocational educators continue their efforts to provide the occupational training and experience needed for students to learn and acquire salable skills. Since no determination has been made as to who will be accountable, to whom, and for what, and no common definition of accountability exists, many vocational educators perceive their responsibility as limited to the provision of this training to students. The questions relating to the accountability issue still remain to be answered.

OTHER ISSUES

In addition to the key issues described above, other issues were identified as concerns for educators but without the emphasis of those described above. Many of these topics are included in the Education Amendments of 1976 (Public Law 94-482), and will doubtless receive increased attention as the impact of the law increases.

Equal Access and Opportunities – Strategies must be developed that will facilitate equal access and opportunities and provide a better understanding of the constraints retarding equal access and opportunity for all youth and adults who desire or need vocational education.

Work Study Programs/Cooperative Education – Vocational educators have met with some success in providing these programs. Administrators who have experienced failure in this area are cautious and reluctant to make another attempt, and have negative attitudes toward these programs. Strategies must be developed or improved that will help administrators better utilize and coordinate the resources of business, labor, and industry to facilitate the transition of learners to the world of work.

Curriculum Management and Instructional Materials – Educators and teachers are flooded with innovations in curriculum and instructional materials. Many lack the expertise to adapt or develop materials to serve their needs or particular problems. Programs should be developed or improved to provide a better understanding of curriculum management, the use of instructional materials, and methods of developing instructional materials.

Personnel Development – Administrators have expressed the need for strategies and programs that will improve the competencies and increase the numbers of available teachers, specifically vocational education teachers.

Systems of Guidance, Counseling, Placement, and Follow-Up – Educators are faced with increasing demands to provide systems and methods for career education, career development, and training relating to employment and other needs of students, out-of-school youth, and adults, and accountability for these services. Existing programs must be upgraded or new programs developed that will improve comprehensive systems of guidance, counseling, placement, and follow-up services to meet career development, vocational education, and employment needs of students, out-of-school youth, and adults.

SUMMARY

The issues discussed in this report were compiled from various educational organizations and education journals.

Table 1 presents issues considered to be of major concern by the following education organizations:

1. American Association of Community & Junior Colleges (AACJC)
2. American Association of School Administrators (AASA)
3. Association for Supervision & Curriculum Development (ASCD)
4. American Vocational Association (AVA)
5. Council of Chief State School Officers (CCSSO)

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6. Education Commission of the States (ESC)
7. National Association of Secondary School Principals (NASSP)
8. National Congress of Parents and Teachers (PTA)
9. National Education Association (NEA)

Table 2 presents issues identified in various education journals. The 1976-77 issues of the journals listed below were surveyed to determine which topics occur most frequently in educational literature:

American Education
American School Board Journal
American Vocational Journal
Compact Magazine
Education Digest
Educational Forum
Educational Leadership Journal
Industrial Education
Journal of Research and Development in Education
National Association of Secondary School Principals Bulletin
The SCEA Emphasis
Today's Education
Training and Development Journal
Worklife Magazine (U.S. Department of Labor)

Table 3 presents the issues and concerns of educators, grouped into three categories of educational needs: system needs, student needs, and professional staff needs.

Although all of the issues included in Tables 1,2, and 3 are identified concerns of educators, a detailed description of some issues was omitted due to their self-explanatory nature.

TABLE 1

MAJOR ISSUES OF CONCERN IDENTIFIED BY EDUCATION ORGANIZATIONS

ISSUES OF CONCERN	EDUCATION ORGANIZATIONS								
	AACJC	AASA	ASCD	AVA	CCSSO	ECS	NASSP	PTA	NEA
Community Involvement	X		X	X	X	X	X	X	X
Title IX (Sex Equality)	X	X	X	X	X	X	X	X	
School Finance Reform		X	X		X	X	X	X	X
Accountability	X	X		X	X	X	X		
Career Education	X	X	X	X		X	X		
Education of the Handicapped	X			X	X	X		X	
Educational Policies and Legislation	X		X	X		X			X
Collective Bargaining			X			X	X		X

TABLE 2

SURVEY OF EDUCATION JOURNALS

Issues Occurring Five or More Times:

Accountability
Adult Education
Apprenticeship Programs
Career Education
Collective Bargaining
Community Involvement
Competency-Based Instruction
Curriculum Development
Declining Enrollments
Drop-Outs
Education of the Handicapped
Educational Assessment
Educational Governance
Energy Education
Environmental Education
Finance
Health Careers
Information Needs
Metric Education
On-the-Job Training
OSHA
Professional Development Activities
Program Evaluation
Safety
School Facilities
Student Placement
Teacher Education
Title IX (Sex Equality)
Training Needs
Violence, Vandalism, and Discipline
Work-Study Programs
Youth Organizations

TABLE 3

ISSUES OF CONCERN BY EDUCATIONAL NEED CATEGORY

SYSTEM NEEDS	STUDENT NEEDS	PROFESSIONAL STAFF NEEDS
Accountability	Apprenticeship Programs	Certification Standards
Community Involvement	Career Education	Clarification of Educational Legislation, Regulations, Requirements and Guidelines
Declining Enrollments	Competency-Based Instruction	Collective Bargaining
Educational Assessment	Drop-Outs	Curriculum Development and Management
Evaluation Procedures	Education of the Handicapped	Education Information
School Finance Reform	Energy Education	Inservice Training
Title IX (Sex Equality)	Environmental Education	Instructional Materials Development
	Systems of Guidance, Counseling, Job Placement and Follow-Up	Pre-Service Training
	Violence, Vandalism, Discipline	Professional Development Activities
	Youth Organizations	Teacher Competency
		Teacher Education Program Improvements

FEDERAL LEGISLATION

SUMMARY OF MAJOR FEDERAL VOCATIONAL EDUCATION LEGISLATION

The Smith-Hughes Act (1917, Amended). The Smith-Hughes Act was the first vocational education legislation passed by Congress. The Act provided $7 million to be allotted annually to the states for education in vocational agriculture, trades and industry, and home economics education. It also established a Federal Board for Vocational Education to administer its provisions, and to promote federal-state cooperation. (This board was abolished in 1946.) The Smith-Hughes Act established the requirements for the submission of state plans, the establishment of state boards of vocational education, qualifications of teachers, and the duration of vocational programs. The Act was passed with no expiration date, and remained virtually unchanged until 1963.

The George-Barden Act (1946, Amended). The George-Barden Act expanded the appropriation of the Smith-Hughes Act to $29 million, to be spent "for the same purpose and in the same manner" as in the Smith-Hughes Act. Vocational agriculture still received the most funding, followed by home economics, trades and industry, and distributive education. In 1956, the Act was amended to include practical nursing and fishery occupations as approved areas of instruction. Although the Act made no specific allocations for teacher training or vocational guidance, each state board was permitted to use such amounts for these areas as they deemed necessary. The Act authorized expenditures for salaries and expenses of state directors of vocational education and vocational counselors, training and work-experience programs for out-of-school youth, supervision of Future Farmer and New Farmer activities, and limited purchase or rental of equipment and supplies for vocational instruction.

The Vocational Education Act of 1963 (Public Law 88-210). The 1963 Vocational Education Act was the most comprehensive vocational legislation ever passed by Congress. It was designed to supplement the Smith-Hughes and George-Barden Acts, which still remained on the books. The Act provided a basis for state and local agencies to expand vocational education beyond the realm of gainful employment, and into broader objectives such as career exploration and preparation for advanced and highly skilled vocational-technical programs in any occupational field which does not require a baccalaureate degree. Allocated funds were scheduled to increase from an initial $60 million to $225 million over a five-year period. The Act specifically made vocational programs available to persons in high school, persons out of high school who were available for full-time study, unemployed and underemployed persons, and persons with academic and socioeconomic handicaps which prevented them from succeeding in regular vocational education programs. The Act authorized ancillary services (e.g., teacher training) to improve the quality of vocational education, matching funds for construction of vocational education facilities, and special funds for research and demonstration projects.

The Vocational Education Amendments of 1968 (Public Law 90-576). The 1968 Amendments were designed in part to help to break down the barriers between academic, general, and vocational curricula so that no young person would be denied an opportunity to prepare for work suiting him as an individual. The 1968 Amendments authorized twice the previous appropriations to be spent for vocational education. The Amendments singled out certain groups of the U.S. population for special consideration, notably urban residents in high unemployment areas, and persons with academic, socioeconomic, and physical handicaps. The 1968 Amendments established national and state advisory councils, gave the councils specific membership requirements to assure adequate representation of areas served by vocational education, and mandated annual evaluation reports from each state council. Funds and requirements for research coordinating units and research and exemplary projects were specified, and increased emphasis on prevocational studies, placement, and counseling was allowed by the Amendments.

The Education Amendments of 1976 (Public Law 94-482). The 1976 Amendments reaffirm the purposes of the 1963 Act and the 1968 Amendments, to provide a complete vocational education system "so that persons of all ages in all communities of the state. . . .will have ready access to vocational training or retraining which is of high quality, realistic in light of actual or anticipated opportunities for gainful employment, and suited to their individual needs, interests, and ability to benefit from such training." Funding authorizations over a five-year period increase from a little over $1 billion to nearly $2 billion. The 1976 Amendments specify even further the necessity of special treatment for disadvantaged and handicapped students, non-English speaking students, female students, and American Indians, where applicable. The 1976 Amendments require a "sole state agency" designated by state law to administer vocational education, with a phasing-in of 50-50 matching for state level administration costs.

Five-year plans as well as one-year plans are required from states, and there must be an opportunity for all segments of the public to contribute to these plans. Accountability reports are required annually. Program improvements include guidance, counseling, job placement, research, exemplary and innovative programs, curriculum development, and grants to reduce sex bias and sex role stereotyping. Local, state, and national advisory councils have been retained. State planning grants, special programs for the disadvantaged, consumer and homemaking education, and renovation and remodeling grants are provided for. Increased cooperation with manpower agencies, including the establishment of a National Occupational Information Coordinating Committee, has also been required by the 1976 Amendments.

SUMMARY OF MAJOR FEDERAL LEGISLATION RELATED TO VOCATIONAL EDUCATION

The Manpower Development and Training Act of 1962 (Public Law 87-415, Amended). The MDTA was created to relieve unemployment in the United States caused by automation, shifts in market demand, foreign competition, and other economic changes. The legislation cited the fact that "as skills are becoming obsolete, employment opportunities for trained personnel are increasing." The law pointed out the need for long-range estimates of training needs, and long-range planning to meet these needs. The MDTA required the Secretary of Labor to make a national assessment of the effects of technological changes in manpower, to establish ways of detecting these effects in advance, to study employment practices affecting worker mobility, and to promote information programs on manpower needs, including research and development studies and their findings.

The MDTA also authorized the establishment of training programs for unemployed and underemployed persons who could not obtain full-time jobs at their skill levels, or who were working "below their occupational potential." The MDTA was amended several times once it became apparent that training, rather than re-training, was the problem with the hard-core unemployed. These amendments allowed short training courses in "basic education skills" to help academically disadvantaged students succeed in regular occupational courses, relocation at government expense in areas of higher employment demands, and counseling and training allowances for youth 16 years old or older who could not otherwise succeed in the labor market.

Title IX of the Education Amendments of 1972. This comprehensive federal law generally parallels Title VI of the Civil Rights Act of 1964, and provides specific guidelines for the prevention of sex discrimination. Title IX applies only to educational programs and activities receiving federal financial assistance. It applies to the treatment of all employees involved in educational programs and activities rather than only those employees directly responsible for the education of students. It makes requirements for self-evaluation by institutions, and establishes grievance procedures. Vocational schools are required to comply with Title IX in specific ways.

They must notify applicants for employment, students and their parents, employees, sources of referral of applicants, and all unions or professional organizations holding collective bargaining or professional agreements with them that the provisions of Title IX will be observed in their hiring, recruitment, and instructional programs.

Vocational institutions receiving federal funds must not deny admission or discriminate in admissions on the basis of sex. They may not give preference to one person over another on the basis of sex, apply quotas for admission on the basis of sex, or apply different admissions criteria on the basis of sex. Within well-defined limites, they may not use tests or other admissions criteria which have a disproportionately adverse effect on persons on the basis of their sex. No rule which treats applicants differently on the basis of sex may be applied concerning actual or potential parental, family, or marital status of any student or applicant for admission. Vocational schools may not discriminate against students for pregnancy, childbirth, or termination of pregnancy, and they may not make pre-admission inquiries as to the marital status of applicants for admission. Preference may not be given to applicants for admission if they attended schools which have enrolled members of one sex if such preference encourages discrimination. Further, recruitment at one-sex or predominantly one-sex institutions is prohibited if such recruitment has the effect of discrimination on the basis of sex. When vocational schools have limited enrollment in the past exclusively or predominately to members of one sex, they must take specific steps designed to encourage individuals of the previously excluded sex to apply for admission, and must emphasize their commitment to dual-sex enrollment.

Sex discrimination in employment is prohibited, and institutions may not discriminate on the basis of sex in the provision of medical,hospital, accident, life insurance, or retirement benefits, leave, or other benefits of service or employment. Affirmative or nondiscriminatory recruitment practices for employment must be used. Pre-employment inquiries about potential or actual marital, parental, or family status are not permitted. When a pattern exists in which members of one sex are more often assigned to, as opposed to hired in, lower ranks, levels, or classifications of job responsibilities and status, the burden is placed on the employer to demonstrate that the pattern is not the result of discriminatory practices. Salaries for the same or comparable jobs and responsibilities must be equal for men and women. Opportunities for professional development must be equally available to men and women or designed to eliminate underrepresentation of members of one sex. Pregnancy and conditions of childbirth, abortion, and miscarriage must be treated as any other disability or medical absence. If apparently neutral practices have adverse effects on members of one sex, these practices may be considered violations of Title IX. Sex as an occupational qualification is to be accepted only under conditions of business necessity, and must be clearly supported by reasonable criteria. For example, a boy's locker room attendant may be chosen on the basis of sex, but a physical education coach may not, even though all of the students in the coach's assigned sport may be all of one sex.

The Comprehensive Employment and Training Act (1973, Amended). CETA is another manpower provision which Congress passed to help deal with unemployment, underemployment, and the problems of disadvantaged youth. The law differs from MDTA in its recognition that much of the public never had any occupational skills, obsolete or not. CETA funds provide for state and local manpower assessment and planning, and thus decentralize decisionmaking to smaller units, rather than having the whole manpower operation directed from Washington. Local prime sponsors, in accordance with plans developed locally and approved by the U.S. Department of Labor, choose eligible target groups, identify jobs which might be accessible to them, determine what services the people in the target groups need to get the jobs, and select institutions, where appropriate, to provide these services. CETA funds, unlike MDTA funds, can be spent for any manpower service, including training, subsidized private employment, work experience, and public service employment. At least 22% of funds must be used for programs for in-school youth carried out in compliance with local education agencies, however.

Youth Employment and Demonstration Projects Act of 1972 (YEDPA). YEDPA is an expansion of CETA, designed to develop programs "to employ and increase the employability of young persons, to help coordinate and improve existing career development, employment and training programs, and to test different approaches in solving the employment problems of youth." Unemployed youths, aged 16-23, who are from lower-income families are eligible for YEDPA programs. The Act includes several programs for youths, including a Young Adult Conservation Corps, which works on federal, state or local park lands; Youth Employment Demonstration Programs, which sets up and tests a variety of strategies to provide jobs, training, and research of youth unemployment problems; Youth Incentive Projects, which provides part-time work training during the school year and full-time summer employment; Youth Community Conservation and Improvement projects, which provides youth with short-term employment on community improvement projects; and Youth Employment and Training Programs, which provides test programs to attack hard-core unemployment problems and enhance job prospects and career opportunities for youth.

Education for All Handicapped Children Act (1975, Amended). This comprehensive extension of educational rights to handicapped students has as its goal that "every child should, by the time he or she has completed secondary school, be prepared for gainful or maximum employment, and for full participation in our society according to his or her ability." It stipulates that a "free appropriate" public school education must be extended to every handicapped child in the United States at no cost to the child's parents or guardians, and that the full range of constitutional rights enjoyed by other students, including due process, non-discriminatory testing and labeling, and confidential handling of records and information, will be guaranteed. States must submit detailed plans specifically outlining their compliance, and must secure the same from local education agencies.

An Individualized Education Program (IEP) must be prepared for each handicapped child, to include an evaluation of the student's present level, annual educational goals, short-range objectives, a list of services to be provided by the school, a description of evaluation processes to be used, a list of specific dates and time-lines, and a plan for an evaluation to occur at least annually. Each child must be educated via the "least restrictive alternative" to include "mainstreaming" whenever possible. Each state is responsible for supporting and monitoring local compliance. The law states that top priority will be given to those handicapped children not presently being educated, and then to the most severely handicapped students in the educational system.

Federal support is provided for state agencies attempting to design and institute programs and procedures which assure compliance with the law. The law also requires the establishment of an advisory committee for federal, state and local levels of implementation, to include handicapped citizens, parents of handicapped children, and representatives of business, industry, education, and community programs.

LEGISLATIVE TRENDS AND FUTURE LEGISLATION OUTLOOK

Unlike the previous sections concerned with legislation, this section is by no means as specific and certain. The information presented has come, necessarily, from special-interest educational groups concerned with legislative prospects. Naturally, no matter how sincere these groups may be in their attempts at objectivity, they tend to project the future as they hope it will be, and often view attempts at new directions with alarm if these new directions threaten their own interests substantially. Thus, although broad predictions of the future in vocational-technical education legislation are useful, they must be considered carefully by planners as enlightened speculations at best.

Almost all sources consulted predict increased federal legislation affecting the operation and nature of public vocational and technical education, and many state the belief that the U.S. Office of

Education will soon become a full-fledged regulatory agency, with much greater influence and control than it now possesses. Most sources predict a great deal of "facilitating legislation" to clarify laws and speed state and local compliance. Legislation mandated by "national interest" is widely believed to be on the increase, with constant broadening and redefining of such concepts as "equal access and opportunity," "due process," and "least restrictive alternative." All sources predict vastly increased legislation on behalf of women and the elimination of sex discrimination and stereotyping, as well as other barriers to women's full participation in all vocational fields. Handicapped students and students who cannot speak English except on a limited basis will also receive further attention to define and guarantee their educational rights. The area of disadvantaged students will also be the object of much more legislation, with broader definitions of what constitutes "disadvantage " and increased emphasis on academic and socioeconomic barriers to their participation in quality education.

Many sources predict that vocational and technical education will have a much closer connection with manpower and labor legislation. According to them, Congress will want evidence that vocational-technical education is a major manpower delivery system, and will stipulate the criteria as better placement rates, stricter accountability, and closer watches by local and state agencies on the needs of the labor market. Vocational-technical education will be required to show that training components have long-term effects on the employment stability of participants. Many sources predict increased on-the-job training for specialized areas beyond vocational-technical education, and say that if the emphasis of vocational education does not shift towards manpower requirements, much of federal funding in this area will be aimed at employment programs which emphasize shorter, more specific training, without so much in-school preparation.

Naturally, optimists see these changes as great opportunities for the expansion of vocational-technical education, and increased emphasis on research, facilities, and training for America's work force. They envision increased federal funds to help state and local organizations to attack the problems defined by present and future legislation, and believe that vocational-technical education will attain even greater importance in the country's educational system. More pessimistic analysts predict that increased federal requirements, without vastly increased federal funding, will place even more strain on a system already burdened with extremely detailed compliance mandates. These latter sources predict cutbacks in services, and eventual supplanting of much vocational-technical education by short-term, stop-gap measures which question the value of intensive preparation for specific occupations. Many sources call for a new "liberal arts" definition of vocational education which provides the students with the basic skills essential to many trades, thus increasing the student's initial employment versatility, and offsetting many problems which arise from specific job gluts and obsolescence.

PUBLIC OPINION POLL

ANNUAL GALLUP POLL OF THE PUBLIC'S ATTITUDE TOWARD THE PUBLIC SCHOOLS

This survey, a joint effort of the Gallup Poll and the Charles F. Kettering Foundation, has been conducted annually since 1969 to obtain public opinions about a number of educational trends, issues, problems, and policies. The polls inform school officials of overall public attitudes, and also provide a national perspective for the measurement and interpretation of local attitudes.

Survey participants each year constitute a scientifically drawn sample of 1500–1600 adults (18 years and older) which is representative of the general public. In recent years, letters have been sent prior to the survey asking educators nationwide for suggestions for new topics that are of greatest concern to them, and a selected panel of citizens has met with Gallup Poll staff members to discuss important issues for inclusion.

For this section, all nine Gallup Polls were reviewed to determine which, if any, survey items each year had possible implications for vocational-technical education, and what the responses of the survey participants were to these items. Some items, even though they were general in nature, had enough bearing on vocational education to warrant some discussion here. Others directly addressed concerns of vocational-technical education. The rest, because they seemed to be too general to have specific relevancy, were omitted from this discussion altogether. The first two surveys (1969 and 1970) contained nothing of significance for this study and have not been included at all.

There has been no apparent shift in public opinion on any of the topics discussed here from the various polls. For this reason, this summary discusses the relevant questions from the polls by topic, rather than in chronological order. The tabulation of responses to each question is included, as well as an indication of the poll and year in which each question was asked.

Public belief in the importance of schools to future success is high, especially among parents of students. The following question was asked in the Fifth Annual Survey (1973):

"How important are schools to one's future success – extremely important, fairly important, not too important?"

The responses are summarized below:

	National Totals %	No Children In School %	Public School Parents %	Private School Parents %	Professional Educators %
Extremely Important	76	71	81	84	69
Fairly Important	19	22	16	13	28
Not Too Important	4	5	2	2	2
No Opinion	1	2	–	1	1
	100	100	100	100	100

However, the public's belief in the importance of schools is significantly related to at least two vocationally relevant indicators of success: the obtaining of better jobs and the making of more money. The Fourth Annual Survey (1972) asked the following question:

"People have different reasons why they want their children to get an education. What are the chief reasons that come to your mind?"

The responses offered (often more than one per respondent) are summarized below:

1.	To get better jobs	44%
2.	To get along better with people at all levels of society	43%
3.	To make more money, achieve financial success	38%
4.	To attain self satisfaction	21%
5.	To stimulate their minds	15%
6.	Miscellaneous reasons	11%

After this question had been answered, respondents were given lists of educational programs and asked to rank them in order of importance. These were the results:

"Which three of these educational programs (card list) would you like your elementary schools (grades 1–6) to give more attention to:"

1. Teaching students the skills of reading, writing and arithmetic
2. Teaching students how to solve problems and think for themselves
3. Teaching students to respect law and authority
4. Teaching students how to get along with others
5. Teaching students the skills of speaking and listening
6. Teaching students vocational skills
7. Teaching students health and physical education
8. Teaching students about the world of today and yesterday (that is, history, geography, civics, etc.)
9. Teaching students how to compete with others

"Which three of these educational programs (card list) would you like your junior or senior schools (grades 7–12) to give more attention to:"

1. Teaching students to respect law and authority
2. Teaching students how to solve problems and think for themselves
3. Teaching students vocational skills
4. Teaching students how to get along with others
5. Teaching students the skills of speaking and listening
6. Teaching students about the world of today and yesterday (that is, history, geography, and civics)
7. Teaching students the skills of reading, writing, and arithmetic
8. Teaching students health and physical education
9. Teaching students how to compete with others

These responses indicate that many of those questioned attached significant importance to the teaching of vocational skills, especially at the junior and senior high school level, where they assigned it the third highest priority.

The public's support for vocational training is also interesting in relation to its perception of the role of schools in preparing students for college. The Third Annual Survey (1971) asked the following question:

"Some people feel that too much emphasis is placed in the high schools on preparing students for college and not enough emphasis on preparing students for occupations that do not require a college degree. Do you agree or disagree?"

The response was as follows:

	National Totals %	No Children In School %	Public School Parents %	Parochial School Parents %	High School Juniors and Seniors %
Agree	68	68	69	67	61
Disagree	23	21	25	27	35
No Opinion	9	11	6	6	4
	100	100	100	100	100

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This feeling that college preparation may be receiving too much emphasis is mirrored in the following questions, asked in the Sixth Annual Survey (1974) of 250 high school juniors and seniors:

"What are the overall educational goals of the school you attend?"

Most of the responses fell into three categories:	High School Juniors and Seniors
1. To prepare students for college	43%
2. To prepare students for jobs	25%
3. To graduate students and get them out of school	10%

"How important is a college education today: extremely important, fairly important, not too important, or not important at all?"

	High School Juniors and Seniors
Extremely	36%
Fairly	51%
Not too	10%
Not at all	2%
Don't Know/No Answer	1%
	100

These responses, especially when viewed in light of the public's feelings that two primary reasons for receiving an education are getting jobs and making money, and that the teaching of vocational skills to junior and senior high school students is very important, suggest that public education might do well to re-evaluate the emphasis it places on college preparation, and consider re-directing part of this emphasis towards vocational and technical training.

Coupled with the public's feeling that vocational-technical training needs to be emphasized more is the feeling that schools need to be paying more attention to providing the "basics" of reading, writing, and mathematical skills to their students. In the lists from the Fourth Annual Survey (1972) cited above, respondents to the survey placed this instruction in the "basics" in a first-priority position in the list of programs to which elementary schools (grades 1–6) should give more attention. For high school students who do not plan to go to college, the importance of these skills is even more clear. The Seventh Annual Survey (1976) asked the following question:

"What requirement, if any, would you set for graduation from high school for those students who do not plan to go on to college but who plan to take a job or job training following graduation? I'll read off a number of requirements and then you tell me how important each one is as a requirement for graduation for these students. We would like to know whether you think it is very important, fairly important, or not important."

The results below show the percentage of responses in descending order for each of the nine requirements:

	Very Important %	Fairly Important %	Not Important %	Don't Know No Answer %
How important is it that these students be able to read well enough to follow an instruction manual?	96	3	–	1
. . . be able to write a letter of application using correct grammar and correct spelling?	92	6	1	1

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	Very Important %	Fairly Important %	Not Important %	Don't Know No Answer %
. . . know enough arithmetic to be able to figure out such a problem as the total square feet in a room?	87	10	2	1
. . . have a saleable skill, such as typing, auto mechanics, nurse's aide, business machines?	85	12	2	1
. . . know something about the U.S. government, the political parties, voting procedures?	75	21	3	1
. . . know something about the history of the U.S., such as the Constitution, Bill of Rights, and the like?	68	27	4	1
. . . know something about the major nations of the world today, their kind of government, and their way of life?	49	40	10	1
. . . know something about the history of mankind, the great leaders in art, literature?	33	44	21	2
. . . know a foreign language?	18	28	51	3

Note that 85% of all respondents felt that the acquisition of saleable skills should be a requirement for graduation from high school, while the "basics" of reading, writing, and arithmetic scored even higher. The Eighth Annual Survey (1976) indicated a similar feeling about the importance of the "basics," as well as the emphasis of career education and the development of saleable skills:

"Which of these ways do you think would do most to improve the quality of public school education overall?"

Here are the responses:

	National Totals %	No Children In School %	Public School Parent %	Parochial School Parents %
Devote more attention to teaching basic skills	51	47	55	60
Enforce stricter discipline	50	47	52	64
Meet individual needs of students	42	39	47	44
Improve parent/school relations	41	43	36	47
Emphasize moral development	39	34	45	49
Emphasize career education and development of saleable skills	38	39	36	37
Provide opportunity for teachers to keep up to date regarding new methods	29	27	32	29

	National Totals %	No Children In School %	Public School Parent %	Parochial School Parents %
Raise academic standards	27	28	23	38
Raise teachers' salaries	14	15	16	8
Increase amount of homework	14	12	17	21
Build new buildings	9	8	12	7
Lower age for compulsory attendance	5	4	6	1
None	1	1	*	–
Don't know/no answer	4	4	2	3

*Less than 1% (Totals add to more than 100% because of multiple answers.)

The concern of the public for the "basics" and for the development of saleable skills extends clearly to the emphasis on career education and career preparation. The Eighth Annual Survey (1976) asked the following question:

"Should public schools give more emphasis to a study of trades, professions, and businesses to help students decide on their careers?"

The response was as follows:

	National Totals %	No Children In School %	Public School Parents %	Private School Parents %	Professional Educators %
Yes, More Emphasis	90	90	90	89	90
No	7	7	7	9	9
No Opinion	3	3	3	2	1
	100	100	100	100	100

There is significant interest in the emphasis of career education for both elementary and secondary school students, although many deem it more appropriate at the secondary level. The Eighth Annual Survey (1976) asked two additional questions concerning career education, and received the following responses:

"Do you think the elementary school curriculum should, or should not, include information about jobs and careers?"

	National Totals %	No Children In School %	Public School Parents %	Parochial School Parents %
Should	52	52	53	47
Should not	39	38	38	48
Don't know/no answer	9	10	9	5
	100	100	100	100

"Do you think that the curriculum should give more emphasis, or less emphasis, to careers and career preparation in high school?"

	National Totals %	No Children In School %	Public School Parents %	Parochial School Parents %
More emphasis	80	80	80	84
Less emphasis	5	4	5	7
About the same as now	11	12	11	8
Don't know/no answer	4	4	4	1
	100	100	100	100

It is interesting to note that the public as well as professional educators seems receptive to the idea that students can learn many things outside the school which may be of importance to them in later life. Their responses imply that considerable support could be mustered for activities like work-study and cooperative programs, which are also being encouraged by Public Law 94-482, the Education Amendments of 1976. The Fourth Annual Survey (1972) asked the following question:

"In most communities students can learn many things outside the school. Would you approve or disapprove if the schools here reduced the amount of classroom instruction to allow students to make greater use of the educational opportunities outside the school?"

The results:

	Public %	Professional Educators %
Approve	56	72
Disapprove	35	26
No Opinion	9	2

The public also overwhelmingly supports the notion that the schools should assume responsibility for providing alternative forms of education for dropouts, the youthful unemployed, and disinterested students who are still in school. The Seventh Annual Survey (1975) asked the following question:

"It has been suggested that the public schools be given the responsibility to set up special job training programs for young people, age 15 to 18, who are out of work and out of school. Would you favor or oppose such a plan?"

The response was as follows:

	National Totals %	No Children In School %	Public School Parents %	Parochial School Parents %
Favor giving schools this responsibility	86	87	85	84
Oppose	11	9	12	15
Don't know/no answer	3	4	3	1
	100	100	100	100

This response is similar to those of an even more detailed series of questions which appeared in the Sixth Annual Survey (1974):

"Some students have no interest in school work as now offered in junior and senior high school and they become a problem. Here are some ways that have been proposed for dealing with these students. Will you tell me in the case of each proposal whether or not you approve of it?"

A. Permit these students to quit school.

	National Totals %	No Children In School %	Public School Parents %	Parochial School Parents %	High School Juniors and Seniors %
Approve	18	21	14	12	44
Disapprove	78	74	82	84	53
Don't know/no answer	4	5	4	4	3
	100	100	100	100	100

B. Have businesses and industries provide on-the-job training as a substitute for regular school.

Approve	74	77	70	67	82
Disapprove	21	17	26	31	14
Don't know/no answer	5	6	4	2	4
	100	100	100	100	100

C. Have special training courses which would prepare them for jobs.

Approve	94	93	94	95	97
Disapprove	4	3	5	3	1
Don't know/no answer	2	4	1	2	2
	100	100	100	100	100

D. Have a work-study program (½ day at school, ½ day on-the-job training).

Approve	86	85	89	86	90
Disapprove	9	9	9	12	10
Don't know/no answer	5	6	2	2	*
	100	100	100	100	100

E. Give school credit for volunteer work during the school day with an approved organization, such as a local hospital, day-care center, and the like.

Approve	77	77	77	74	83
Disapprove	17	15	20	24	15
Don't know/no answer	6	8	3	2	2
	100	100	100	100	100

F. Have separate programs for students with out-of-the-ordinary interests.

Approve	79	76	82	82	83
Disapprove	14	14	13	15	13
Don't know/no answer	7	10	5	3	4
	100	100	100	100	100

* Less than 1%. Figure totals 100 because of rounding.

The unanimity of these responses reflects that a vast majority of those questioned in the survey believe that schools should provide positive alternatives to the solution of merely quitting school altogether. The results are interesting also because they indicate that large percentages of the people questioned recognize vocational-technical alternatives as possible solutions, and because they suggest that such alternatives should be further emphasized if they provide relief for this serious condition.

Further evidence of the public's feeling that the schools should be responsive to the needs of their students for completing courses of study which will lead to future success is the positive response to the following question from the Third Annual Survey (1971):

"Would you like to see the students in the local schools be given national tests so that their educational achievement could be compared with students in other communities?"

	National Totals %	No Children In School %	Public School Parents %	Parochial School Parents %	High School Juniors and Seniors %
Yes	70	69	72	70	66
No	21	20	22	24	31
No Opinion	9	11	6	6	3
	100	100	100	100	100

Clearly, taxpayers want results, and are interested in having educators prove that the public is getting its money's worth from school expenditures. However, the public seems quite willing to cooperate with the schools, and eager to assist them in overcoming many of their problems. The responses to the following question, which appeared in the Eighth Annual Survey (1976), have interesting implications for vocational-technical education:

"Some school boards have appointed citizen advisory committees to deal with a number of school problems such as discipline, the curriculum, textbook selection, teacher evaluation, the athletic program, and the like. The committees report their findings to the school board for possible action. If such a plan were adopted here (or exists here) which of these problems would you most like to deal with on a citizen advisory committee?"

Here are the responses:

ADVISORY COMMITTEE	Percent who would like to serve on such a committee*
1. Discipline and related problems	47
2. Student/teacher relations	31
3. Career education	29
4. Student dropouts	29
5. Teacher evaluation	28
6. The handicapped student	26
7. Educational cost/finances	22
8. The curriculum	21
9. Education for citizenship	19
10. Work-study programs	19
11. Home-study programs	19
12. Community use of school buildings	16
13. Pupil assessment and test results	15
14. School facilities	14
15. Public relation of schools	13
16. School transportation	12
17. The athletic program	12

ADVISORY COMMITTEE	Percent who would like to serve on such a committee*
18. Educational innovations	12
19. Extracurricular activities	11
20. Progress of recent graduates	9
21. None	4
22. Don't now /no answer	6

* Totals more than 100% because of multiple answers

Note that career education ranked third in the choices of the respondents. More important, however, is the fact that only 4% of the respondents did not wish to serve on any advisory committee, and only 6% did not know or did not answer. Vocational-technical education, because it is legally mandated to rely on advisory committees, should be encouraged by this indication that 90% of the poll's respondents were interested enough to want to serve the schools in some advisory capacity.

However, the public's willingness to serve on advisory committees does not seem to imply that the public wishes to control the school systems outright. This distinction is made clear by the following questions from the Ninth Annual Survey (1977):

"Many school systems have committees made up of citizens who serve in an advisory capacity. Do you think these advisory groups should have the final decision-making authority over the **curriculum**, or should the final authority remain with the school board?"

	National Totals %	No Children In School %	Public School Parents %	Parochial School Parents %
Authority with citizen groups	17	18	15	23
Authority with school board	71	68	78	71
Don't know/no answer	12	14	7	6
	100	100	100	100

"How about decisions regarding **staff selection**—should the final authority be given to these citizens committees or should the final authority remain with the school board?"

	National Totals %	No Children In School %	Public School Parents %	Parochial School Parents %
Authority with citizen groups	15	15	13	18
Authority with school board	75	73	80	76
Don't know/no answer	10	12	7	6
	100	100	100	100

"And decisions about the **budget**— should the final authority be given to these citizens committees or should the final authority remain with the school board?"

	National Totals %	No Children In School %	Public School Parents %	Parochial School Parents %
Authority with citizen groups	19	20	19	32
Authority with school board	70	68	72	65
Don't know/no answer	11	12	9	3
	100	100	100	100

Another significant area of concern is addressed in the Ninth Annual Survey (1977). This survey asked several questions relating to the control and financing of education, specifically about the responsibilities of federal and local governments in both. These questions seem especially important to vocational-technical education, because financing and control of vocational-technical education, more than other forms of education, is directly addressed by federal legislation, particularly Public Law 94-482, the Education Amendments of 1976. Public support for local control is high, as the responses to the following question suggest:

"When federal agencies appropriate money for educational programs they usually require the schools that receive this money to spend it as these agencies direct. Should, or should not, this be changed to permit local school authorities to decide how the money is to be spent?"

	National Totals %	No Children In School %	Public School Parents %	Parochial School Parents %
Yes, change to allow local people to decide	62	60	65	67
No, should not change	29	29	29	27
Don't know/no answer	9	11	6	6
	100	100	100	100

This reluctance to have local educational institutions directed by the government on expenditure of federal funds has other implications, as suggested by the following question, also from the Ninth Annual Survey (1977):

"Services for the physically and mentally handicapped student cost more than regular school services. When local schools are required to provide these special services by the federal government, should the federal government pay the extra cost, or not?"

	National Totals %	No Children In School %	Public School Parents %	Parochial School Parents %
Yes, government should pay extra cost	82	80	85	84
No, should not	11	12	9	14
Don't know/no answer	7	8	6	2
	100	100	100	100

What the respondents seem to be saying is that when federal aid to education is awarded, it should be administered locally. If, on the other hand, the government requires special programs at the local level, then it should pay the costs of these programs.

In general, the results of the Gallup Polls discussed in this section seem clearly relevant to vocational-technical education. People agree that schools are important to the future success of their students, although a college education is only fairly important and too much emphasized. Schools need to teach more of the "basics," and more about careers. They need to provide all students with saleable skills, and to assume greater responsibility for the productive education of disinterested students, dropouts, and the youthful unemployed. The public is willing to serve the schools in an advisory capacity, but believes firmly that local school administrators, rather than citizens' groups or the federal government, should control the nation's educational system.

STATISTICAL DATA

This section includes statistical information which helps to establish the broad, national context of vocational education. It includes charts taken from the document *The Condition of Education, 1978 Edition*, issued by the U.S. Department of Health, Education, and Welfare, Washington, D.C., and information on employment trends and specific occupational employment projections from the *Occupational Outlook Handbook, 1978-79 Edition* (Bulletin 1955), U.S. Department of Labor, Bureau of Labor Statistics. It is included because it supports, illustrates or expands statements presented in the various narrative portions of the National Overview component and is intended to be supplementary in nature, although admittedly not comprehensively so.

Other specific national data on enrollments and expenditures in vocational-technical education have not been available beyond 1976. Because Public Law 94-482 so vastly altered the system on which these reports are based, the only national information specifically concerning vocational-technical education operations which has been included is a brief section on enrollments (Tables 4 and 5), based on 1976 data (the most recent available). This information is based on data included in *Vocational and Technical Education: Selected Statistical Tables, Fiscal Year 1976*, issued by the U.S. Department of Health, Education, and Welfare, Washington, D.C.

TABLE 4

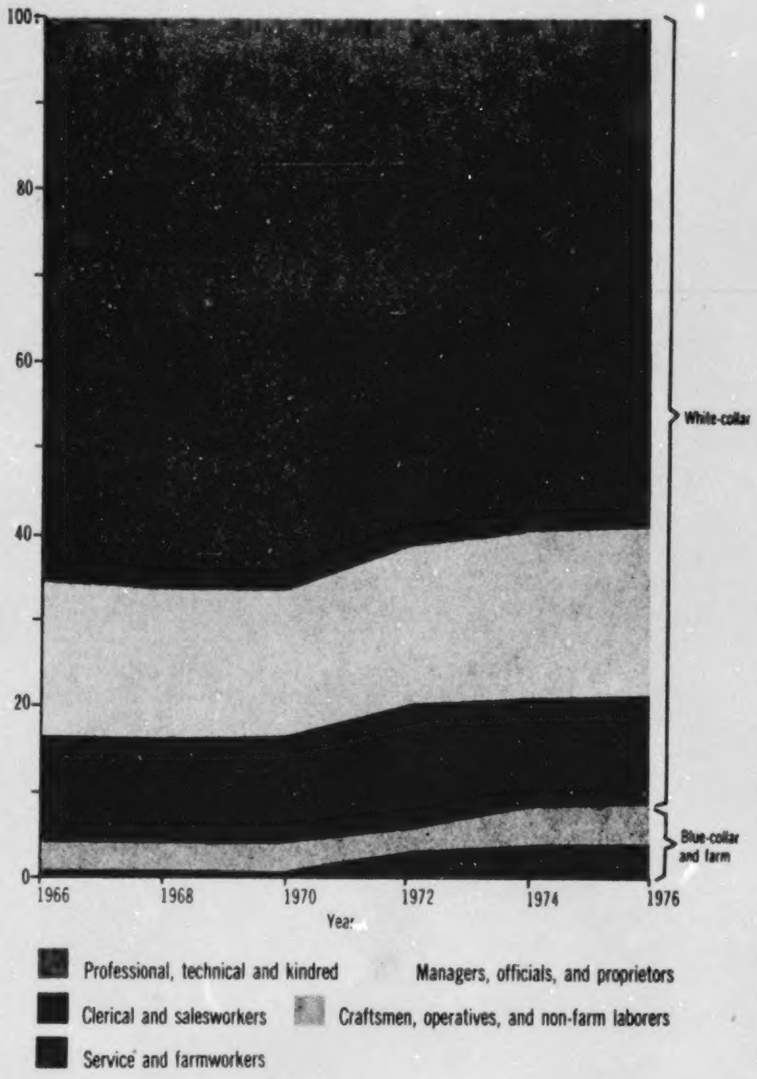
1976 TOTAL AND FEMALE ENROLLMENT BY PROGRAM AREA, FOR ALL INSTRUCTIONAL LEVELS

	TOTAL	PROGRAM % OF TOTAL	FEMALE	% FEMALE WITHIN PROGRAM	% DISTRIBUTION OF FEMALES AMONG PROGRAMS
Agriculture	1,059,717	8.3	109,951	10.4	1.8
Distributive Education	900,604	7.0	366,705	40.7	5.9
Health Occupations	684,904	5.3	476,802	69.6	7.6
Consumer & Homemaking	3,515,042	27.3	2,688,807	76.5	43.1
Occupational Home Economics	471,289	3.7	349,932	74.2	5.6
Office Occupations	3,114,692	24.2	1,907,146	61.2	30.6
Trade & Industrial Education	3,109,950	24.2	338,389	10.9	5.4
TOTAL	12,856,198	100.0	6,237,732	48.5	100.0

TABLE 5

1976 TOTAL SECONDARY, POST-SECONDARY, AND ADULT ENROLLMENT BY PROGRAM AREA

	SECONDARY		POST-SECONDARY		ADULT	
	TOTAL	%	TOTAL	%	TOTAL	%
Agriculture	712,184	9.8	67,663	3.7	279,870	9.1
Distributive Education	360,784	4.9	192,436	10.4	347,384	11.4
Health Occupations	108,116	1.5	290,007	15.7	286,781	9.4
Consumer & Homemaking	2,703,469	37.0	47,756	2.6	113,817	3.7
Occupational Home Economics	240,399	3.3	61,966	3.4	168,924	5.5
Office Occupations	1,824,465	25.0	620,102	33.6	670,125	21.9
Trade & Industrial Education	1,352,932	18.5	565,594	30.6	1,191,424	39.0
TOTAL	7,302,349	100.0	1,845,524	100.0	3,058,325	100.0

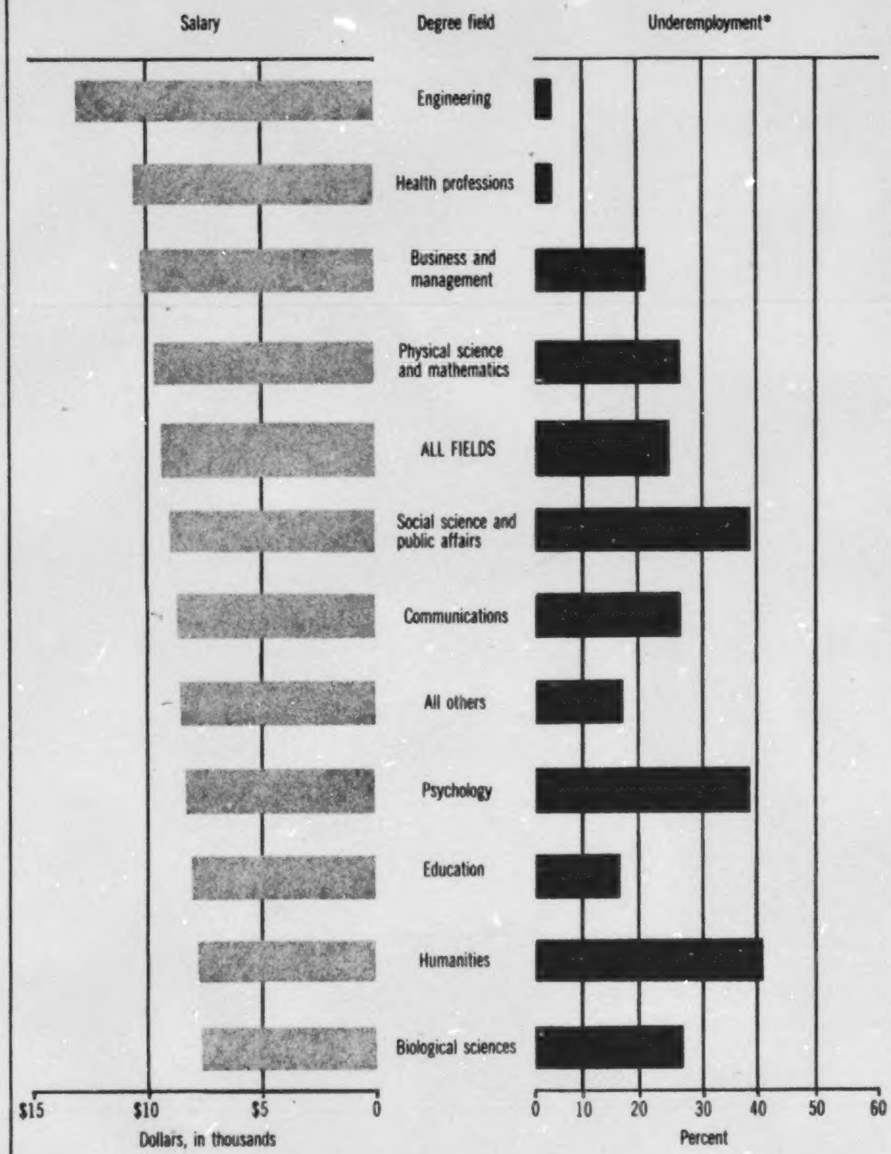


Percent of college graduates employed in the civilian labor force

NCES

Chart 3.19
Average Salary and Underemployment of Recent Recipients of Bachelor's Degrees

Among recent college graduates, those with degrees in engineering were earning higher salaries and were less likely to be underemployed than those with degrees in other fields.



*A college graduate working full-time is classified as underemployed if he or she is in a job that is not professional, technical, managerial, or administrative and, when asked, has stated that his or her job did not require a college degree.

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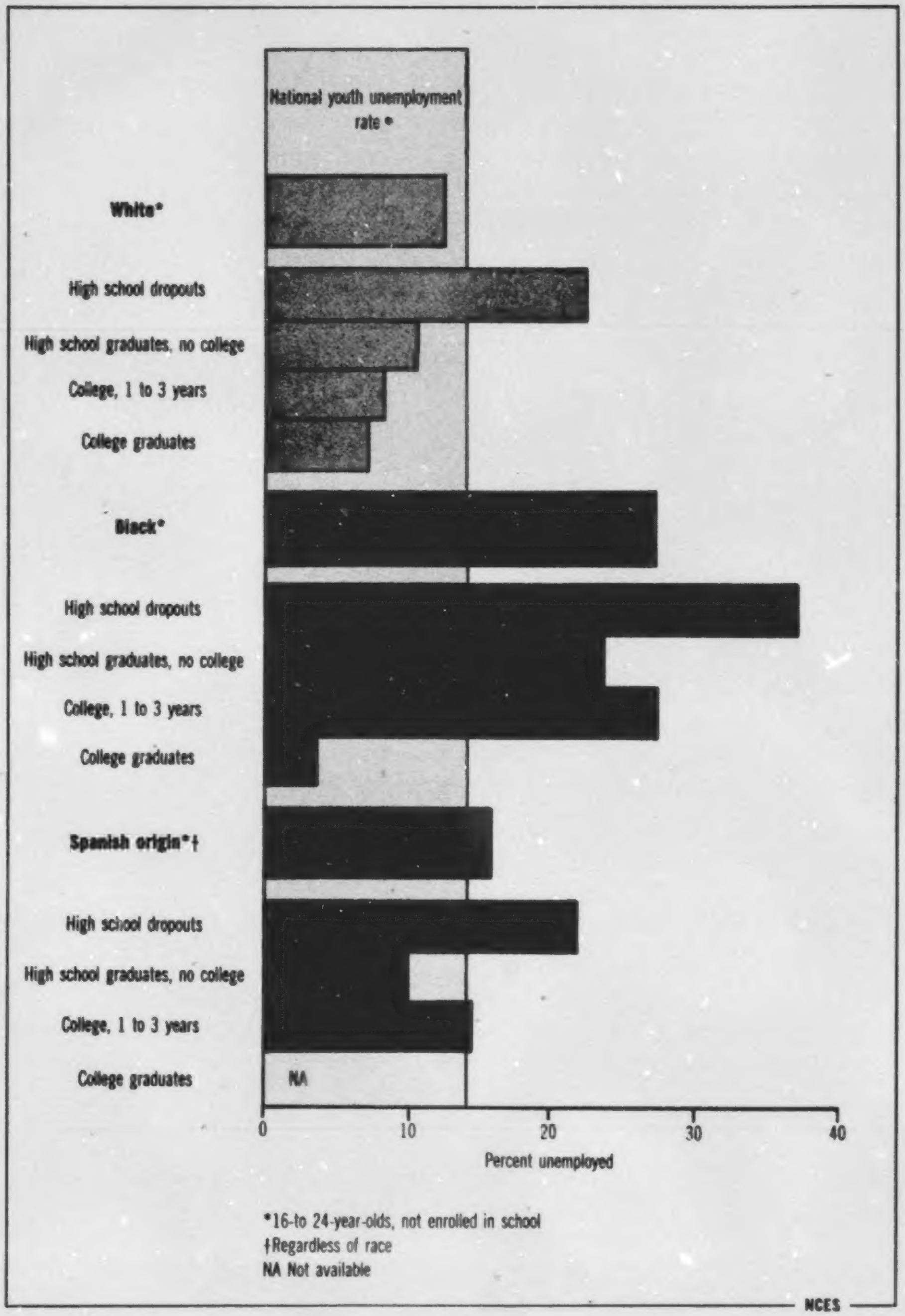
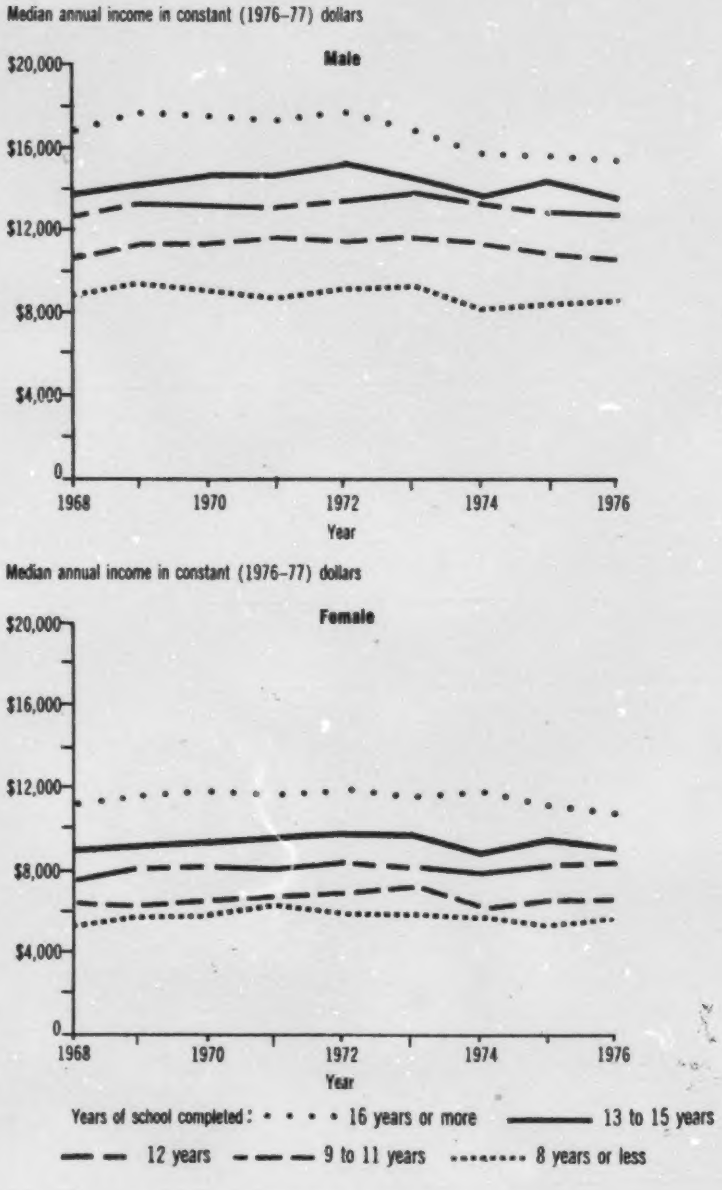
Chart 1.4
Youth Unemployment by Educational Attainment

White and Hispanic youths who complete high school have unemployment rates below the national average for youth. Among black youths, only those who complete college have rates below the national average.



*16-to 24-year-olds, not enrolled in school
†Regardless of race
NA Not available

52

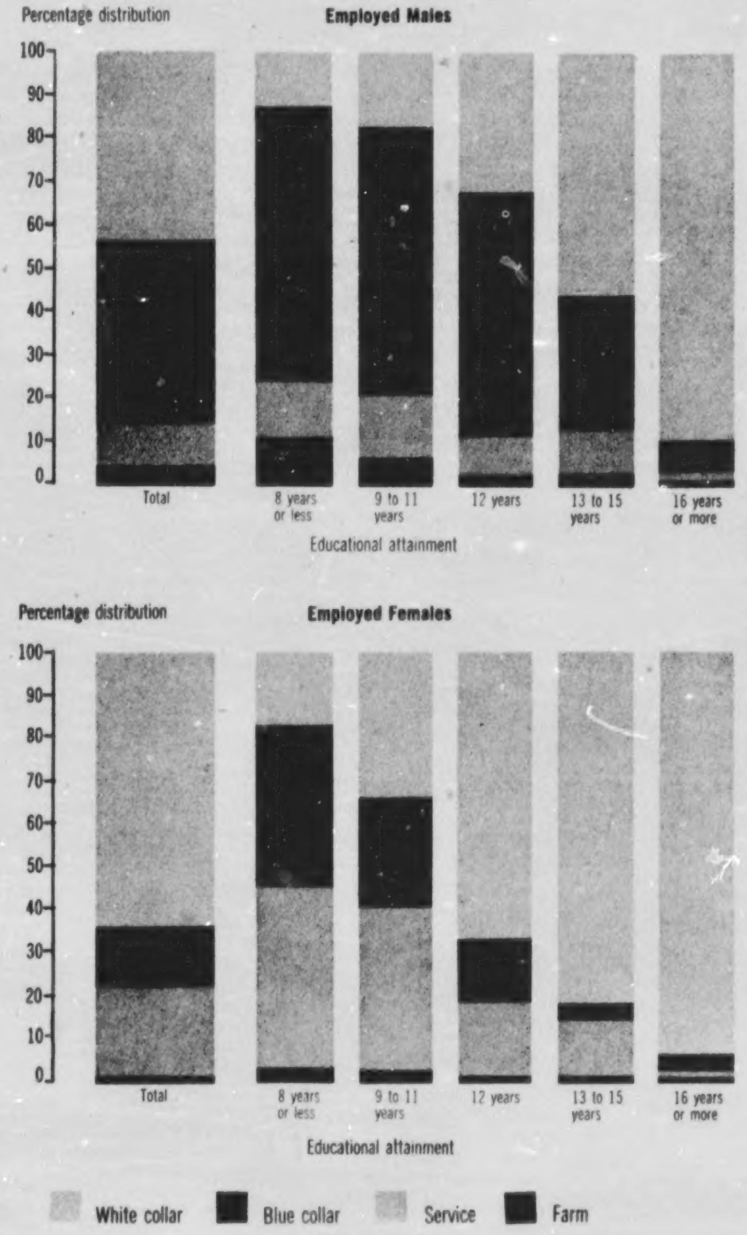


*Year-round full-time workers, 25 to 34 years old

NCES

Chart 1.7
Occupational Distribution by Sex and Educational Attainment

Greater education attainment is strongly associated with movement upward in occupational rank. Male workers without a high school education are more likely to be in manual work, female workers in service work.



NCES

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Chart 1.12
Population Size of School-Age Groups

As the size of the elementary school-age population continues to decrease, the secondary school-age group begins its decline. The traditional pool of postsecondary education participants, the 18- to 24-year-old group, will soon level off while the number of older potential participants will continue to rise.

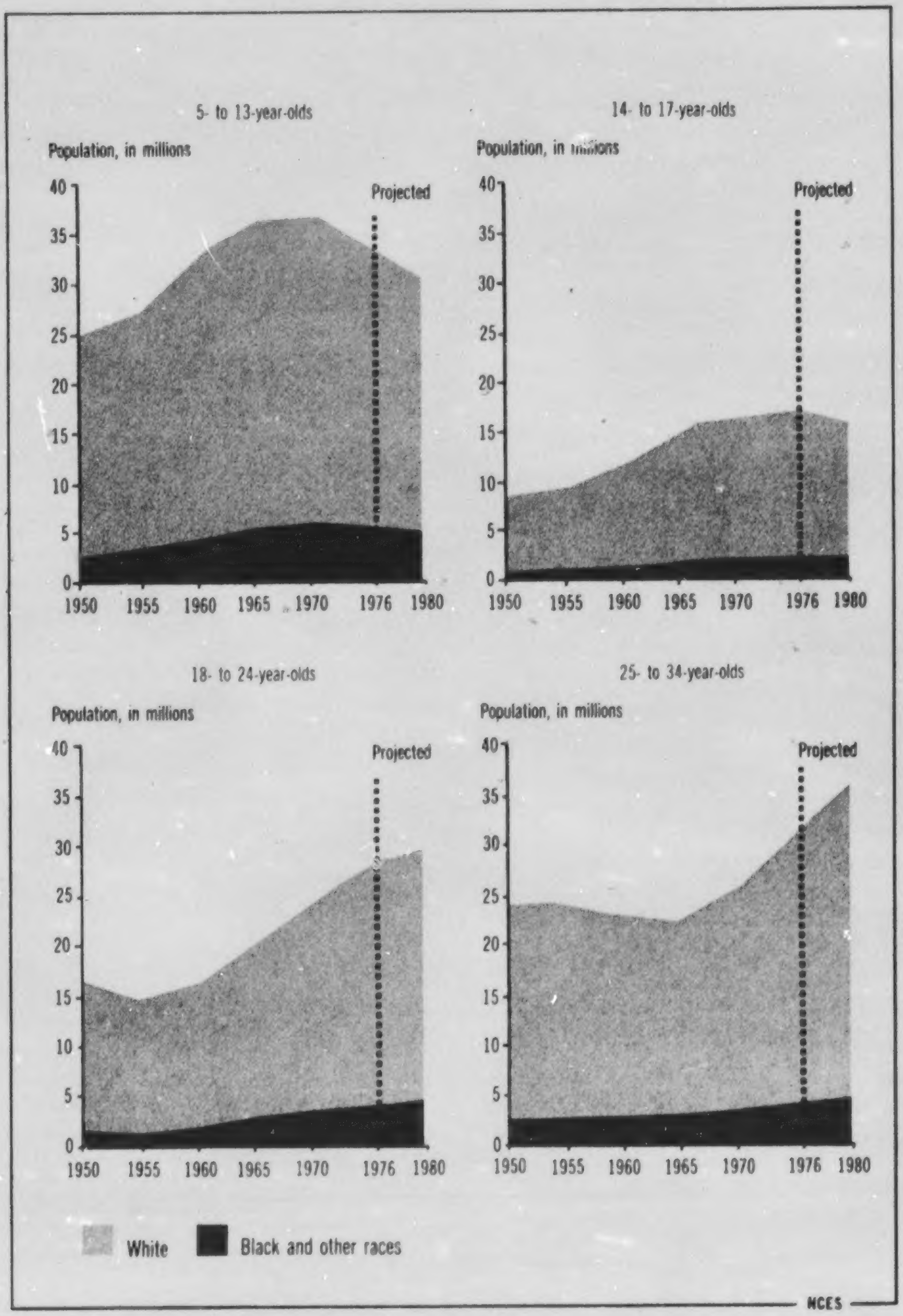
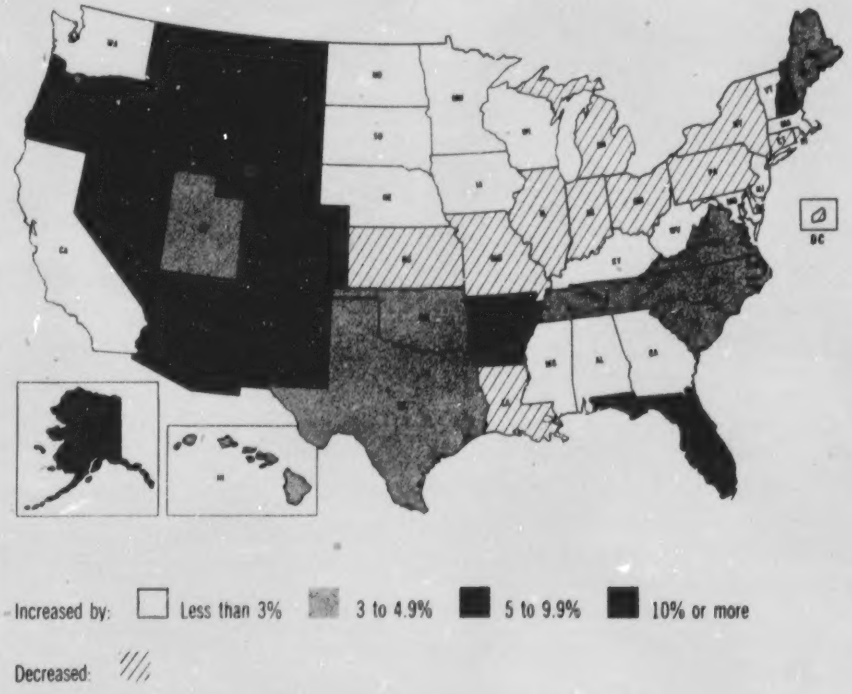


Chart 1.13
Change in 5- to 17-Year-Old Population Due to Migration: 1970 to 1975

Some Mid-Atlantic and North Central States have experienced the impact of population declines more sharply because of out-migration. The national decline of the school-age population has been offset in Florida and in some Western Mountain States by the influx of new residents.


DC
Increased by:
☐ Less than 3%
▨ 3 to 4.9%
■ 5 to 9.9%
■ 10% or more
Decreased: ▨

NCES

Children, 5 to 17 years old, in families below the poverty level and poverty rates: 1970 and 1975

Region and State	Poor children, 5 to 17 years old		Poverty rate		Change in poverty rate from 1970: Increase: +, Decrease: –
	1970	1975	1970	1975	
United States	7,700,368	7,132,000	14.8	14.5	–*
Northeast	1,247,028	1,330,110	10.5	12.0	+*
New England	260,121	283,270	8.9	10.1	+
Maine	36,308	38,690	14.2	15.3	+
New Hampshire	14,286	20,310	7.7	10.3	+*
Vermont	13,062	20,020	11.4	17.8	+*
Massachusetts	116,900	123,540	8.4	9.3	+
Rhode Island	24,482	21,520	11.0	10.5	–
Connecticut	55,083	59,190	7.2	8.4	+
Middle Atlantic	986,907	1,046,840	11.0	12.7	+
New York	526,402	524,020	12.2	13.1	+
New Jersey	155,690	193,800	8.7	11.6	+*
Pennsylvania	304,815	329,020	10.6	12.6	+
North Central	1,539,350	1,576,880	10.4	11.6	+
East North Central	1,023,717	1,160,900	9.7	12.0	+*
Ohio	273,542	293,650	9.8	11.6	+
Indiana	123,484	120,440	9.0	9.6	+
Illinois	302,311	389,150	10.7	15.1	+*
Michigan	220,485	251,710	9.1	11.3	+*
Wisconsin	103,895	105,950	8.7	9.4	+
West North Central	515,633	415,980	12.1	10.7	–*
Minnesota	98,936	87,340	9.5	9.1	–*
Iowa	72,000	53,270	9.8	7.9	–*
Missouri	172,955	157,040	14.8	14.7	–
North Dakota	27,354	17,820	15.7	11.5	–*
South Dakota	33,815	21,660	18.3	13.1	–*
Nebraska	45,952	36,100	12.8	10.1	–
Kansas	64,621	42,750	11.5	8.6	–*
South	3,815,961	3,098,210	23.5	19.6	–*
South Atlantic	1,605,208	1,397,080	20.7	18.2	–*
Delaware	17,372	14,300	12.8	16.4	–
Maryland	116,951	104,150	11.5	10.7	–
District of Columbia	37,193	22,740	23.2	15.7	–*
Virginia	214,357	155,750	18.2	13.7	–*
West Virginia	106,359	76,020	24.3	18.9	–*
North Carolina	312,545	221,210	24.0	17.8	–*
South Carolina	206,985	165,700	29.1	23.9	–*
Georgia	293,871	254,660	24.4	21.3	–
Florida	299,575	382,550	18.5	21.6	+
East South Central	987,444	696,460	29.3	21.7	–*
Kentucky	208,462	170,230	25.1	21.4	–
Tennessee	245,157	195,680	24.8	20.5	–*
Alabama	272,146	136,210	29.5	15.9	–*
Mississippi	261,679	194,340	41.5	32.6	–*
West South Central	1,223,309	1,004,670	23.9	20.3	–*
Arkansas	155,135	106,060	31.6	21.4	–*
Louisiana	308,850	219,900	30.1	22.9	–*
Oklahoma	122,548	86,990	19.5	14.6	–*
Texas	636,776	591,720	21.5	20.5	–
West	1,098,029	1,126,320	12.4	12.9	+
Mountain	336,281	328,535	14.7	13.8	–
Montana	24,998	22,760	12.9	12.5	–
Idaho	23,716	22,530	12.0	11.0	–
Wyoming	10,054	7,740	11.2	8.6	–*
Colorado	71,254	64,090	12.3	10.7	–
New Mexico	80,559	77,940	26.3	26.0	–
Arizona	84,014	92,430	17.5	16.8	–
Utah	30,796	25,270	10.0	8.0	–*
Nevada	10,890	15,770	8.8	11.0	+*
Pacific	761,746	797,790	11.8	12.6	+
Washington	80,172	81,290	9.3	10.0	+
Oregon	53,953	42,760	10.3	8.4	–*
California	595,765	648,050	12.1	13.8	+
Alaska	12,393	6,150	14.8	8.4	–*
Hawaii	19,465	19,540	9.7	9.6	–

*Change is statistically significant at the 0.05 level.

NOTE: The definition of poverty is the one officially adopted by the Office of Management and Budget. The 1970 data are from the 1970 decennial census.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, Survey of Income and Education, unpublished tabulations.

Chart 1.10
School-Age Children with Working Mothers

Despite declines in the size of the school-age population, both the proportion and number of 6- to 17-year-olds with working mothers have risen over the last 7 years.

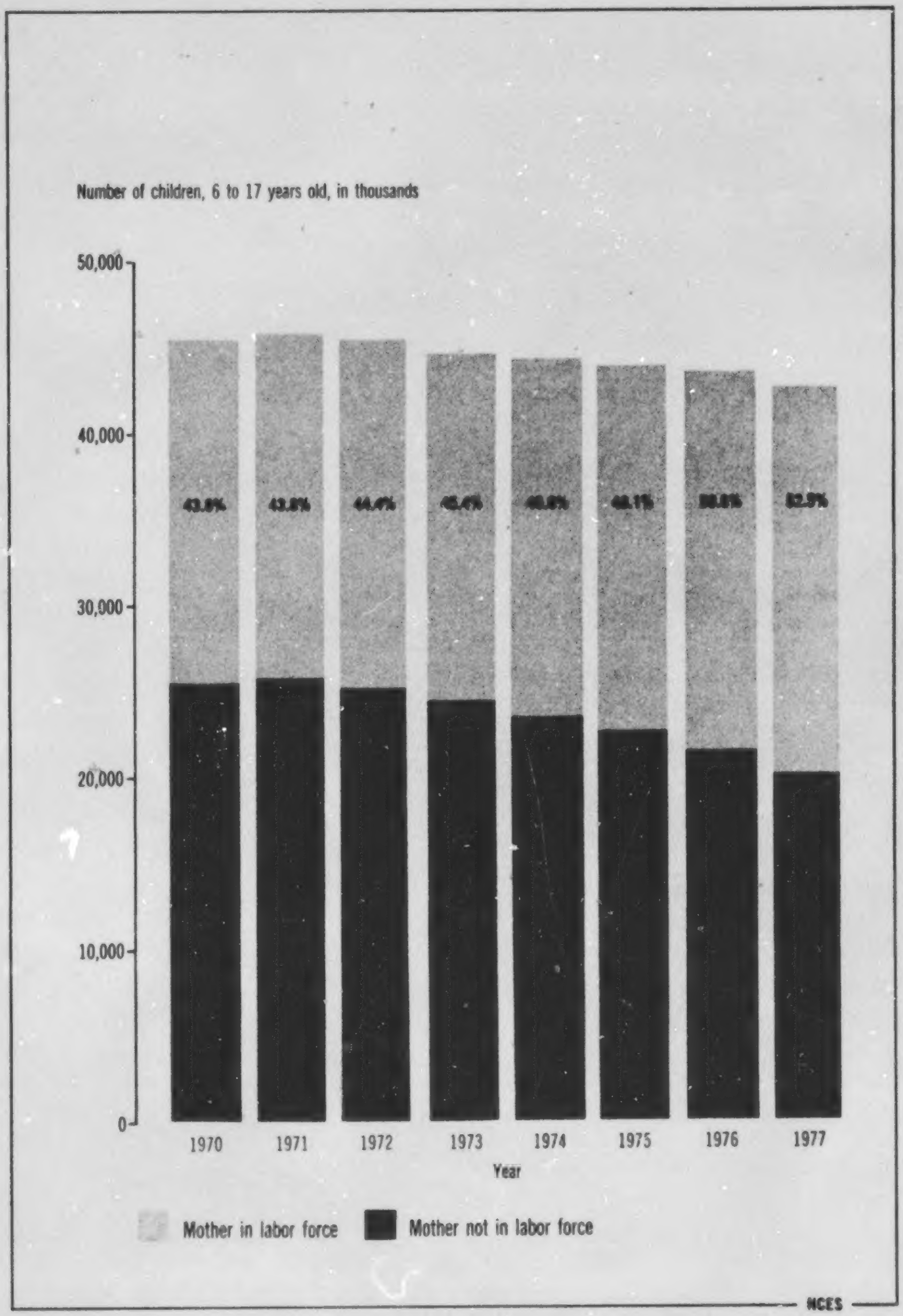


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Chart 1.9
Civilian Labor Force Participation Rates

Civilian labor force participation rates for females have risen appreciably over the last quarter of a century. The most rapid expansion in labor force participation in recent years has been experienced by mothers.

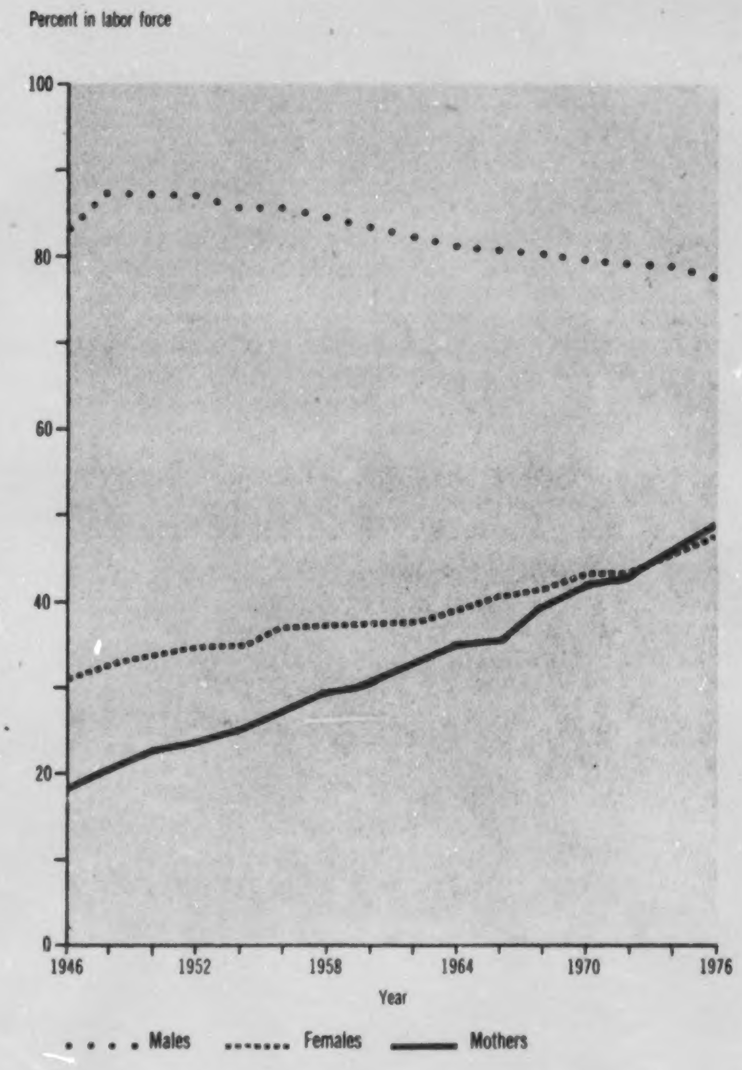

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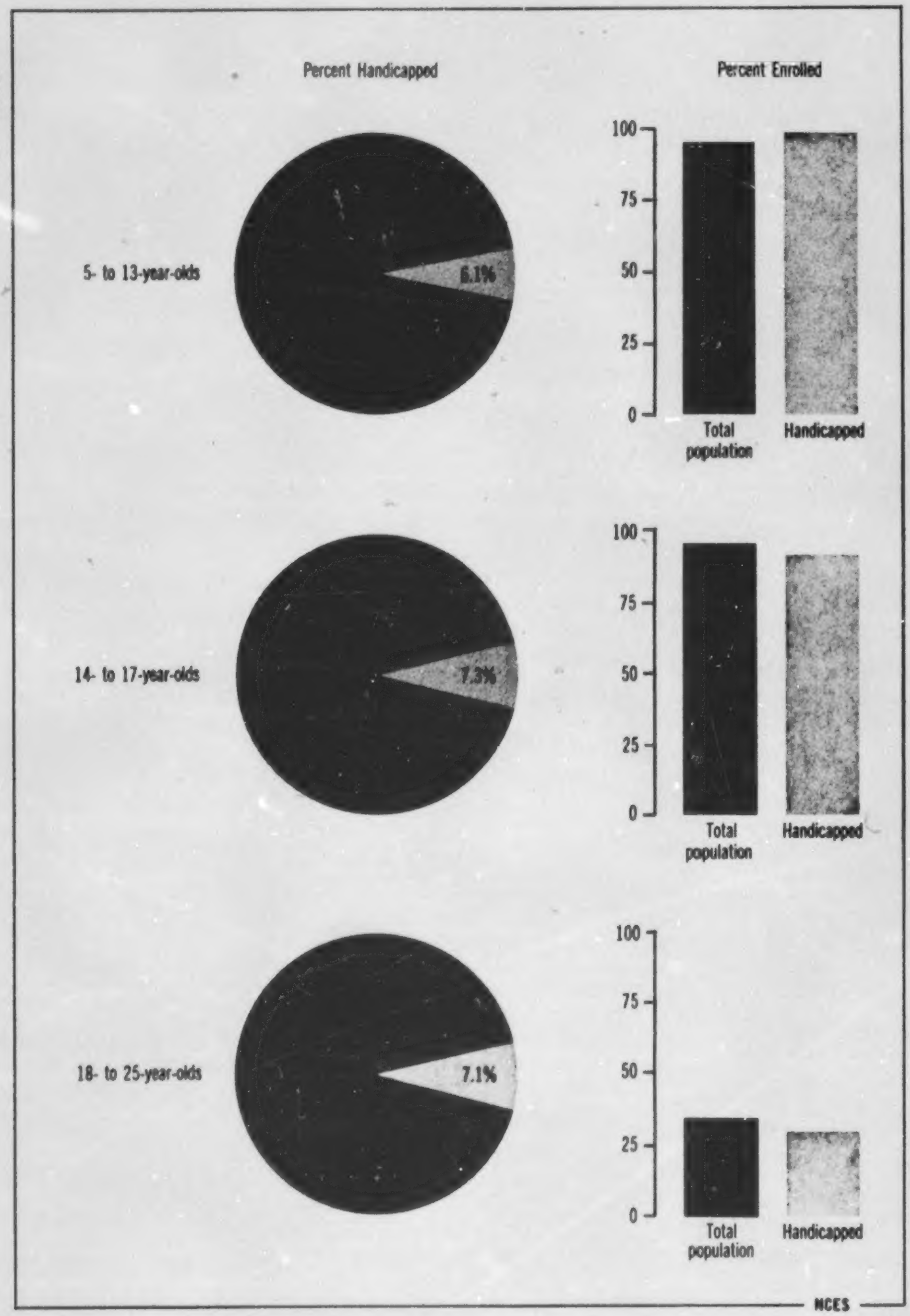
Chart 1.16
Estimated Population Percentage and School Enrollment of Handicapped Persons

Handicapped persons comprise approximately 7 percent of the 5- to 25-year-old population. Enrollment is high among the handicapped of elementary school-age but falls below the enrollment rate of the general population among the older age groups.



60

Chart 1.17
Expenditures as a Percent of Gross National Product (GNP)

Almost 8 percent of the Gross National Product is spent for education by elementary and secondary schools and institutions of higher education. In recent years education expenditures have been surpassed by health expenditures.

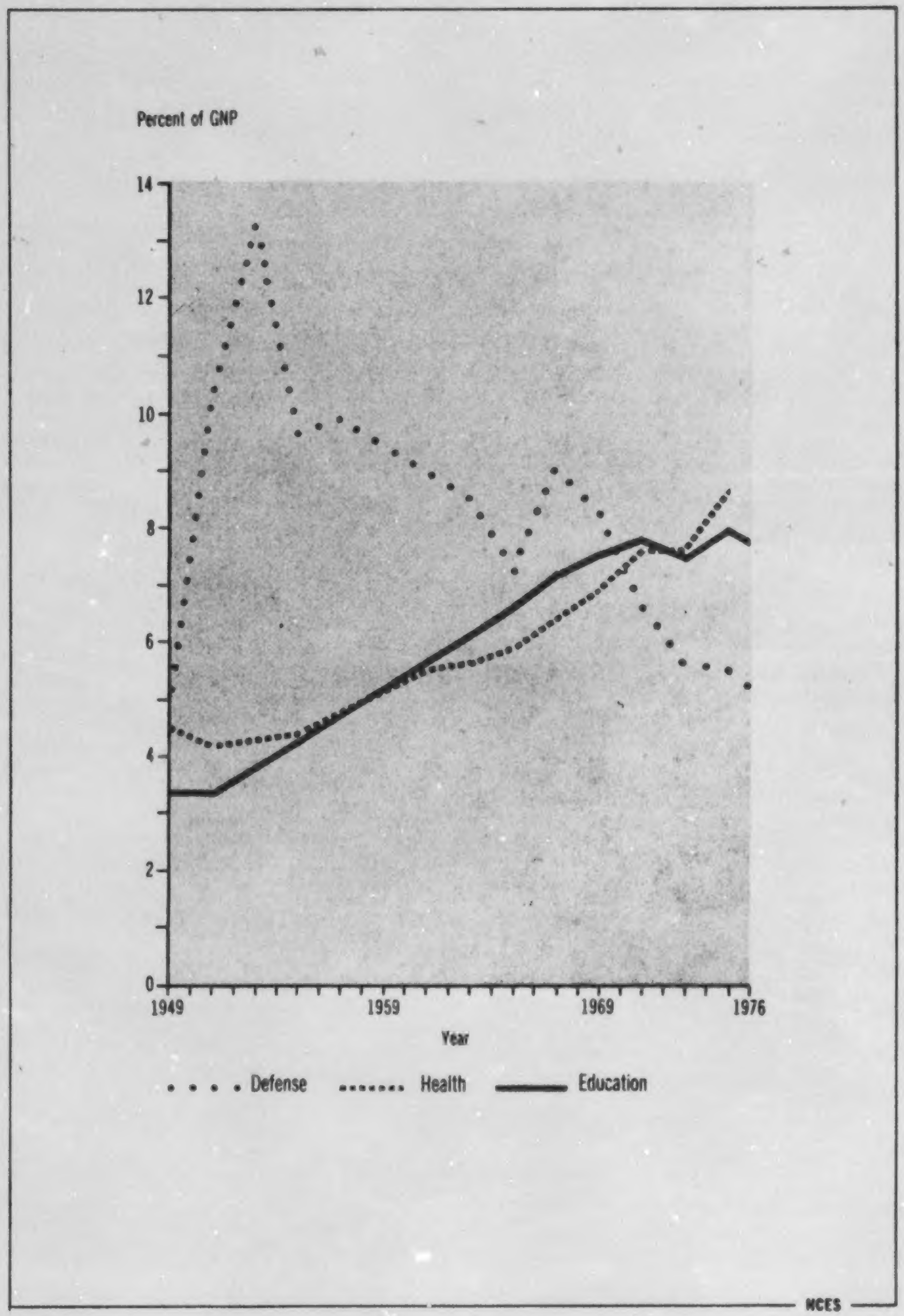


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Chart 1.18
State and Local General Expenditures

Education commands a sizeable proportion, 38 percent, of State and local general expenditures, although its share has declined slightly since the 1960's. In absolute dollars, educational expenditures have more than doubled over the last decade.

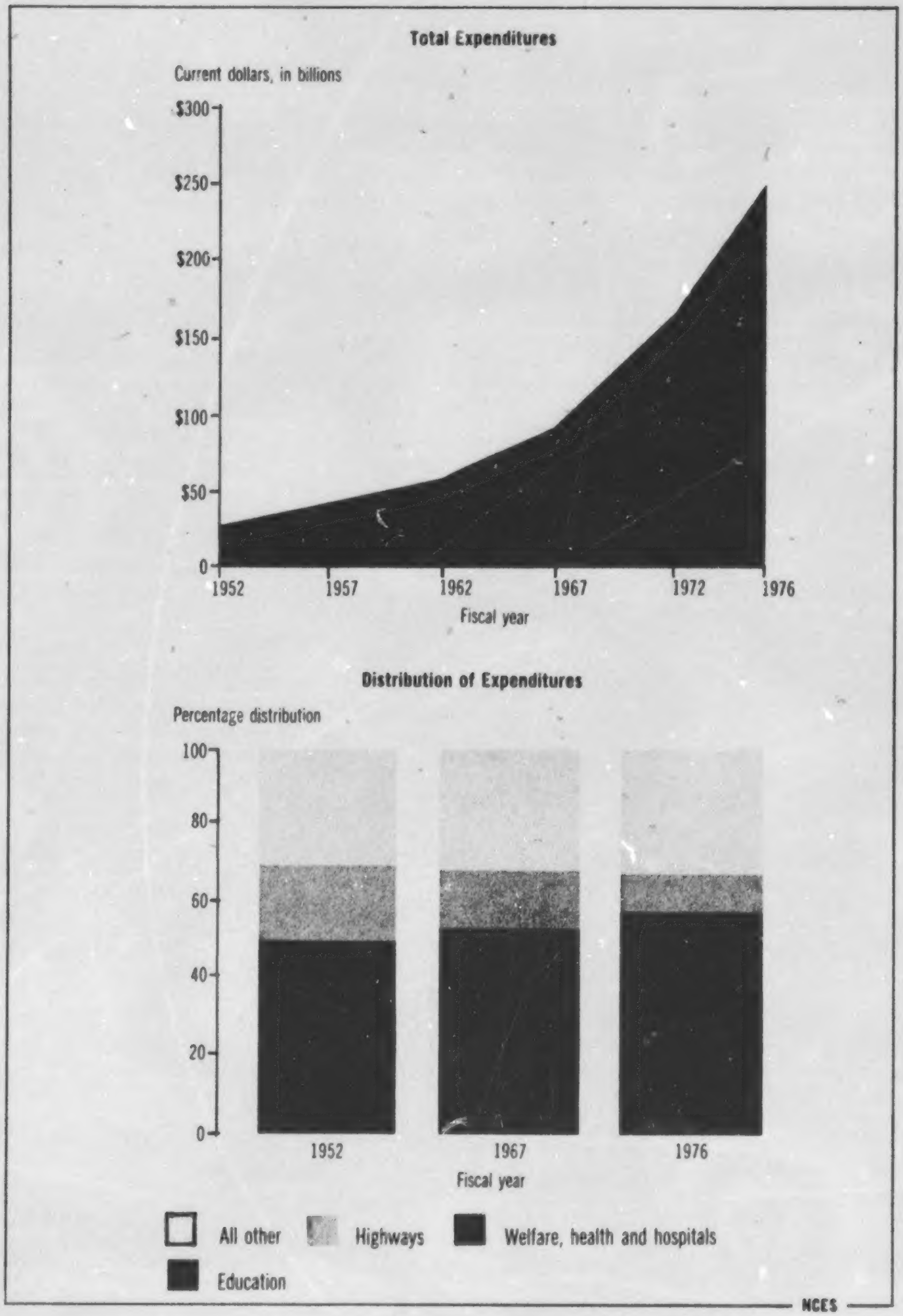

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Chart 2.11
Elementary and Secondary Education Expenditures Per Pupil

Even when adjusted for inflation and changing enrollment size, current expenditures have risen substantially over the last two decades.

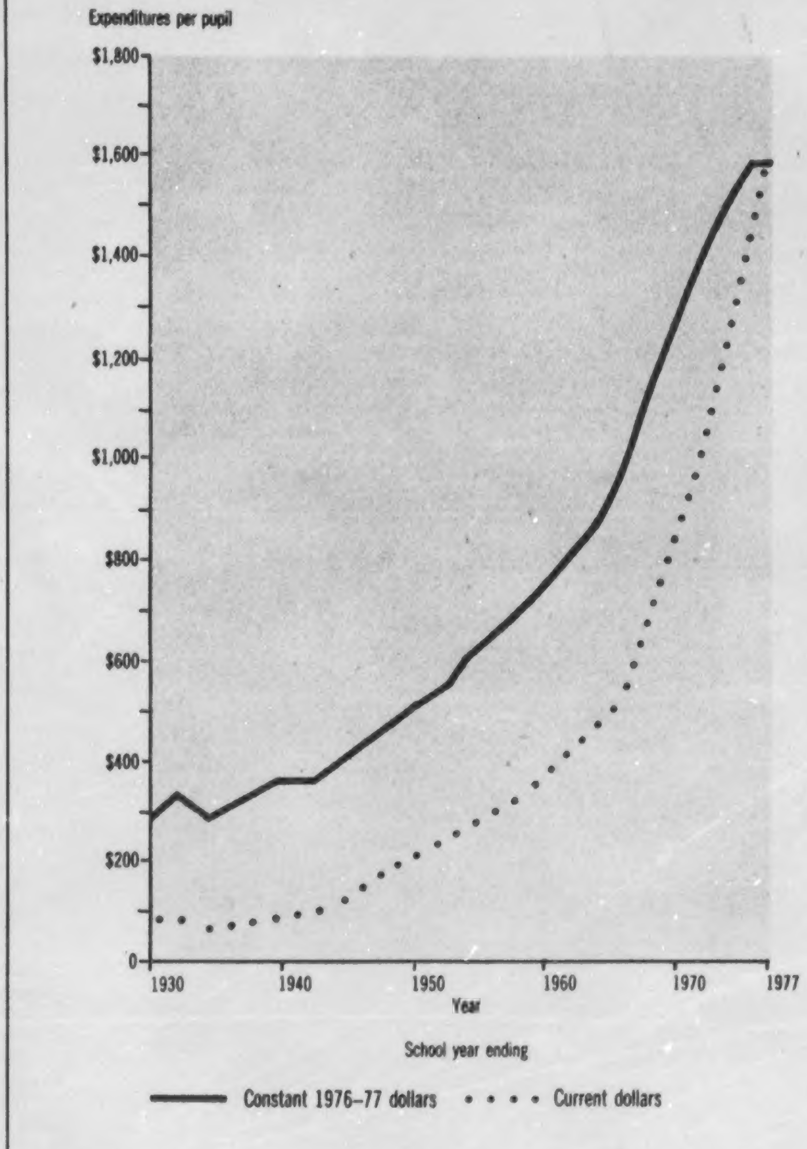

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Chart 2.12
Per-Pupil Revenue for Elementary and Secondary Education by Source

States vary considerably in the amounts of funds they allocate to public elementary and secondary education. Federal funding helps to reduce these interstate disparities because the poorest States tend to receive somewhat greater shares than the wealthier ones.

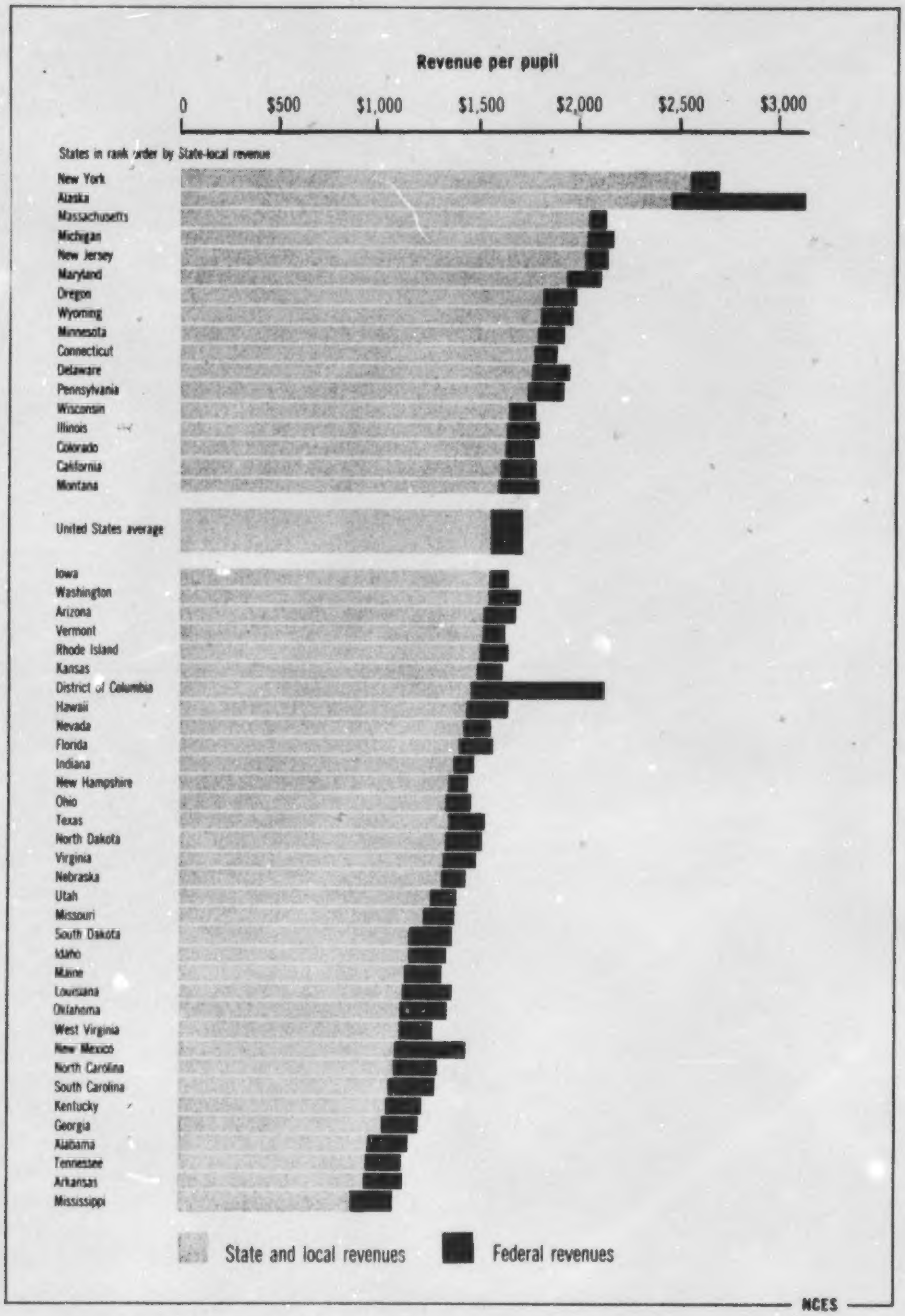

Chart 2.13
Change in Within-State Disparities in Per-Pupil Expenditures from 1970 to 1975

Disparities between rich and poor school systems have diminished in about half the States that have enacted financial reforms and fewer than 20 percent of the States without reform programs. In 11 of the 29 nonreform States, disparities have actually increased since 1970.

	Changes in disparities		
	Decreased	No change	Increased
School Finance Reform States:	[illegible]	Connecticut California Ohio Colorado Maine Wisconsin Indiana Utah	Montana Minnesota
Non-reform States:	Vermont New Hampshire Missouri Rhode Island South Dakota Nevada	Tennessee Arkansas Delaware South Carolina Pennsylvania North Carolina Oklahoma Oregon West Virginia Alabama Louisiana Alaska	Georgia Massachusetts Kentucky New York Washington Wyoming Mississippi Virginia Maryland Nebraska Idaho

NCES

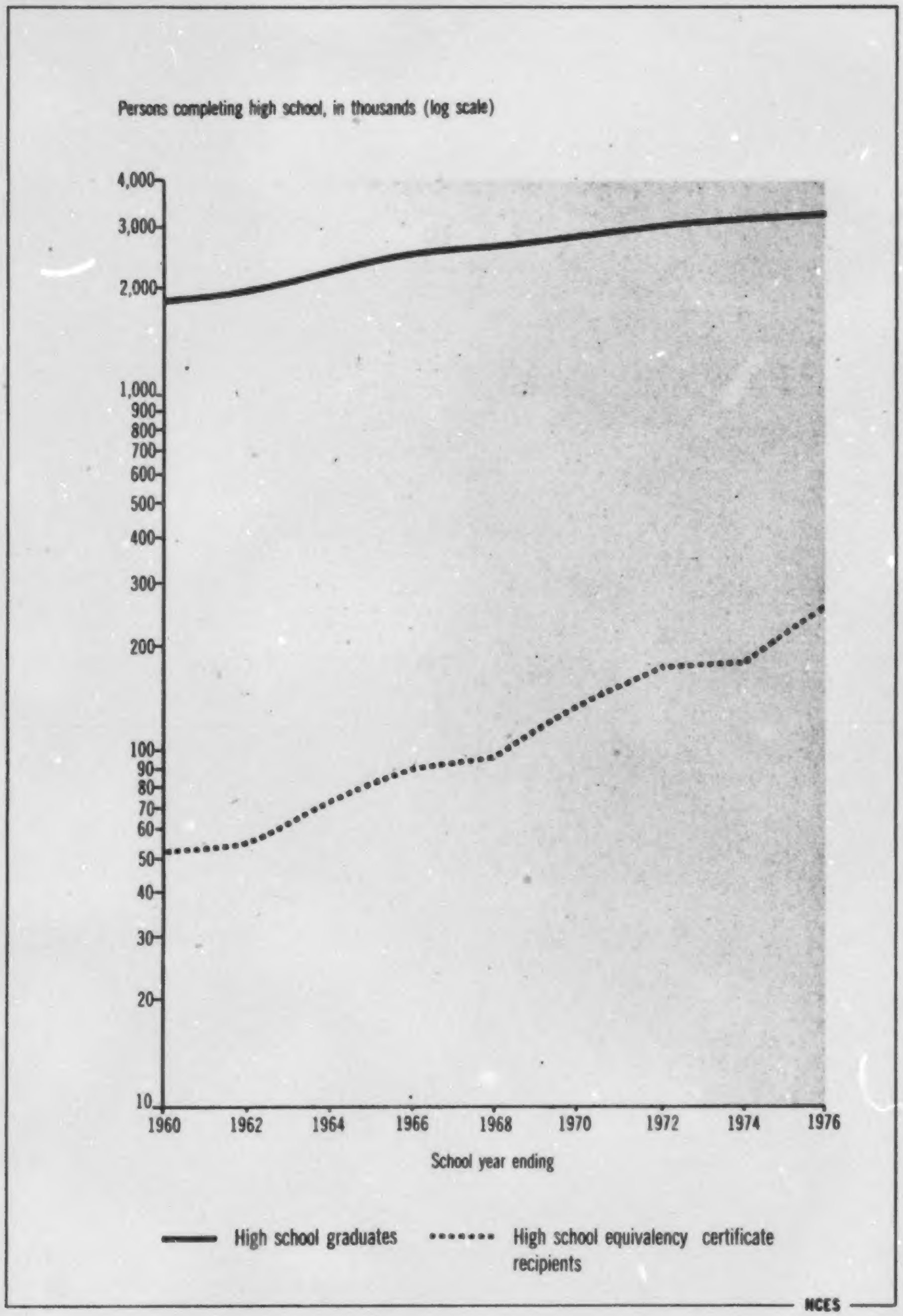
Persons completing high school, in thousands (log scale)
4,000
3,000
2,000
1,000
900
800
700
600
500
400
300
200
100
90
80
70
60
50
40
30
20
10
1960
1962
1964
1966
1968
1970
1972
1974
1976
School year ending
High school graduates
High school equivalency certificate recipients
NCES

Chart 2.22
Achievement in Subject Areas by Age and Racial/Ethnic Group

In all age groups, blacks and Hispanics performed below the national means on achievement tests in five learning areas.

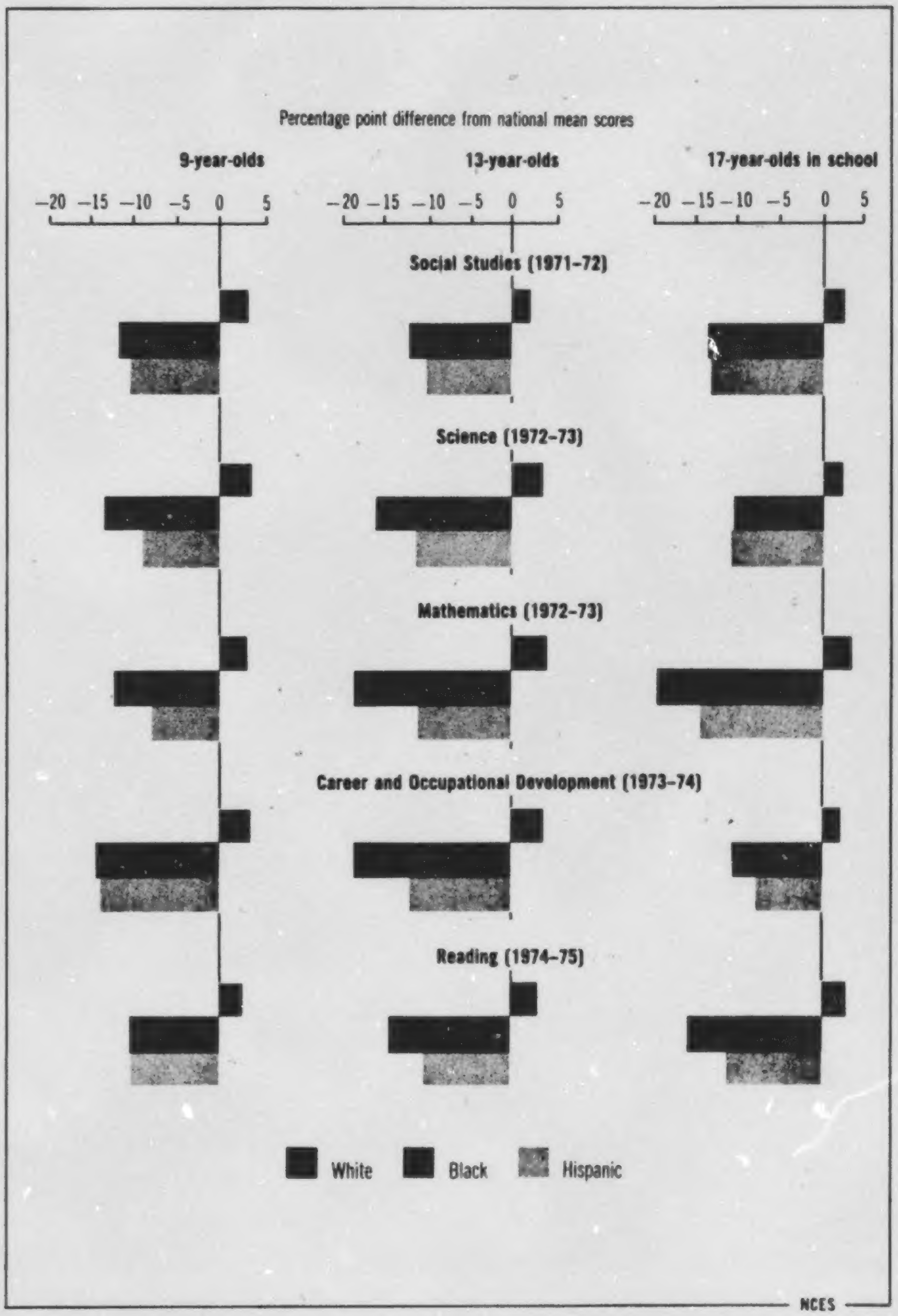

Chart 3.4
Enrollment in Institutions of Higher Education

Projected enrollment growth in higher education is greatest for public 2-year institutions.

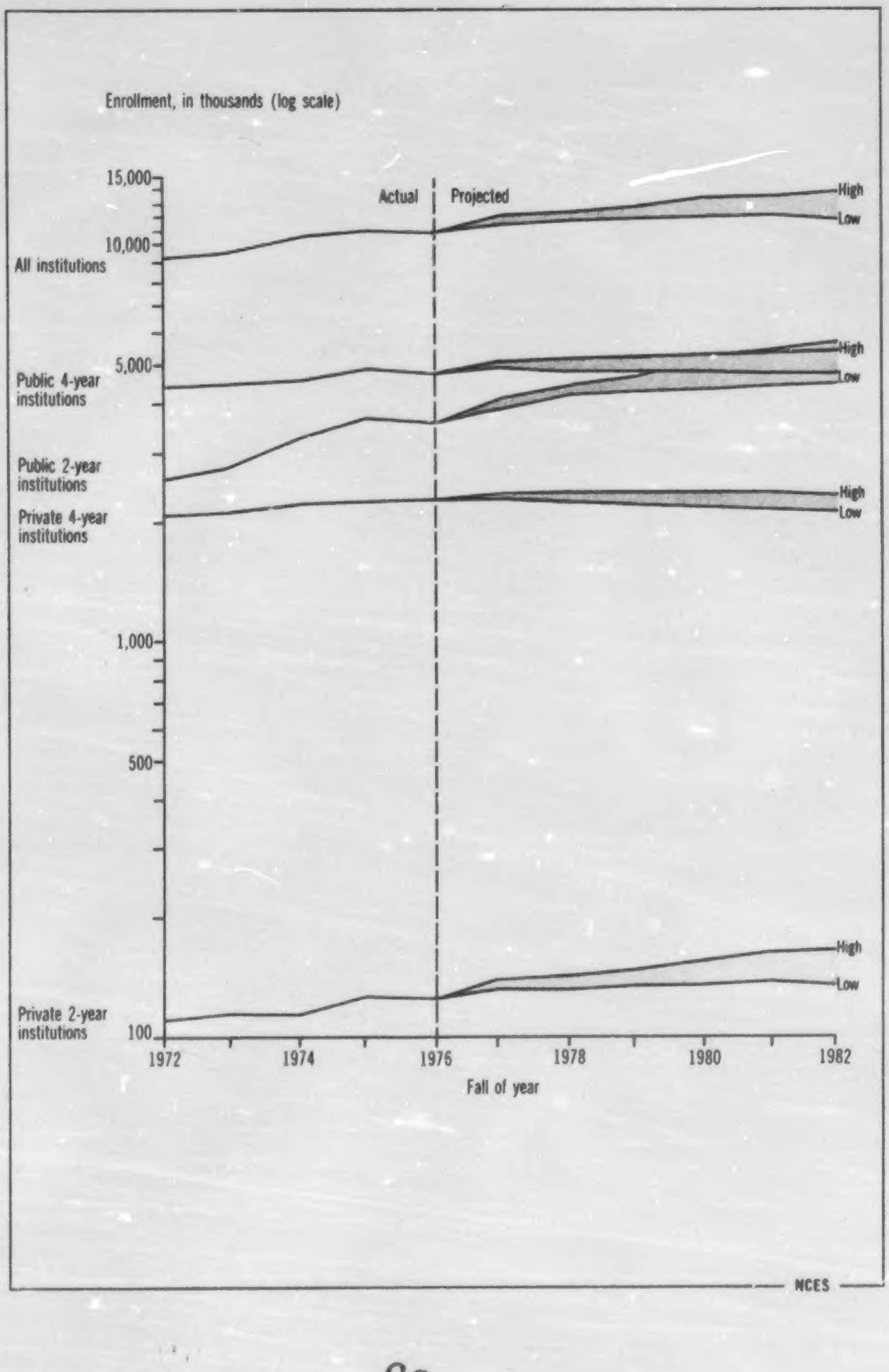

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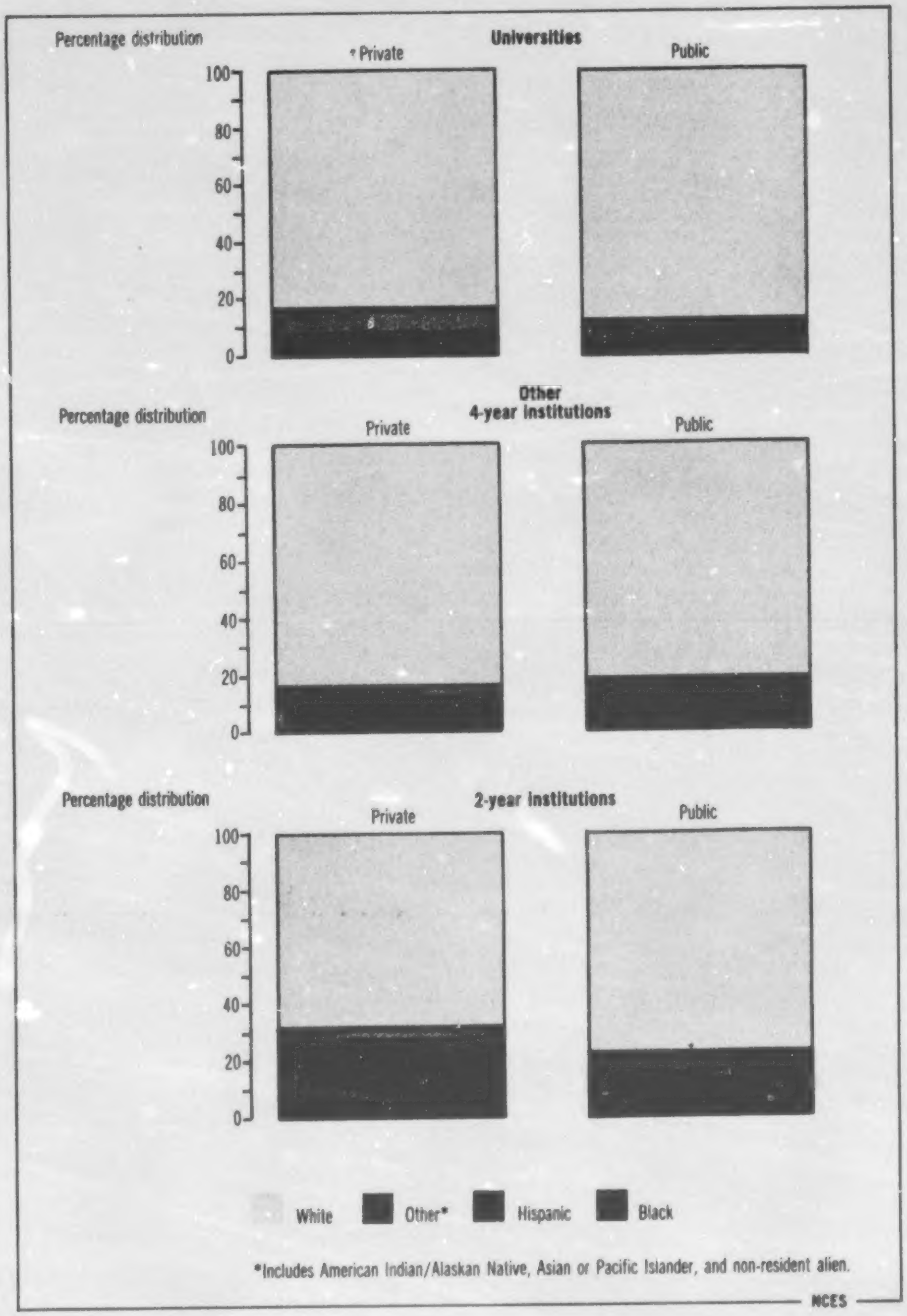
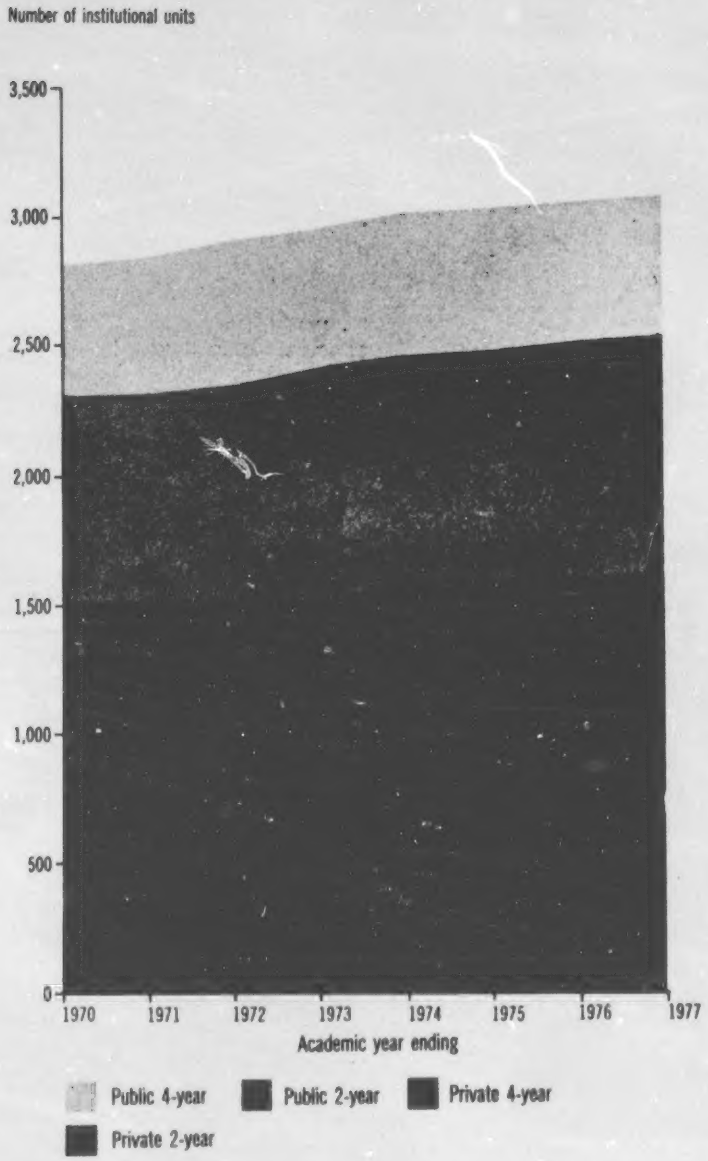
Chart 3.6
Enrollment in Institutions of Higher Education, by Racial/Ethnic Group

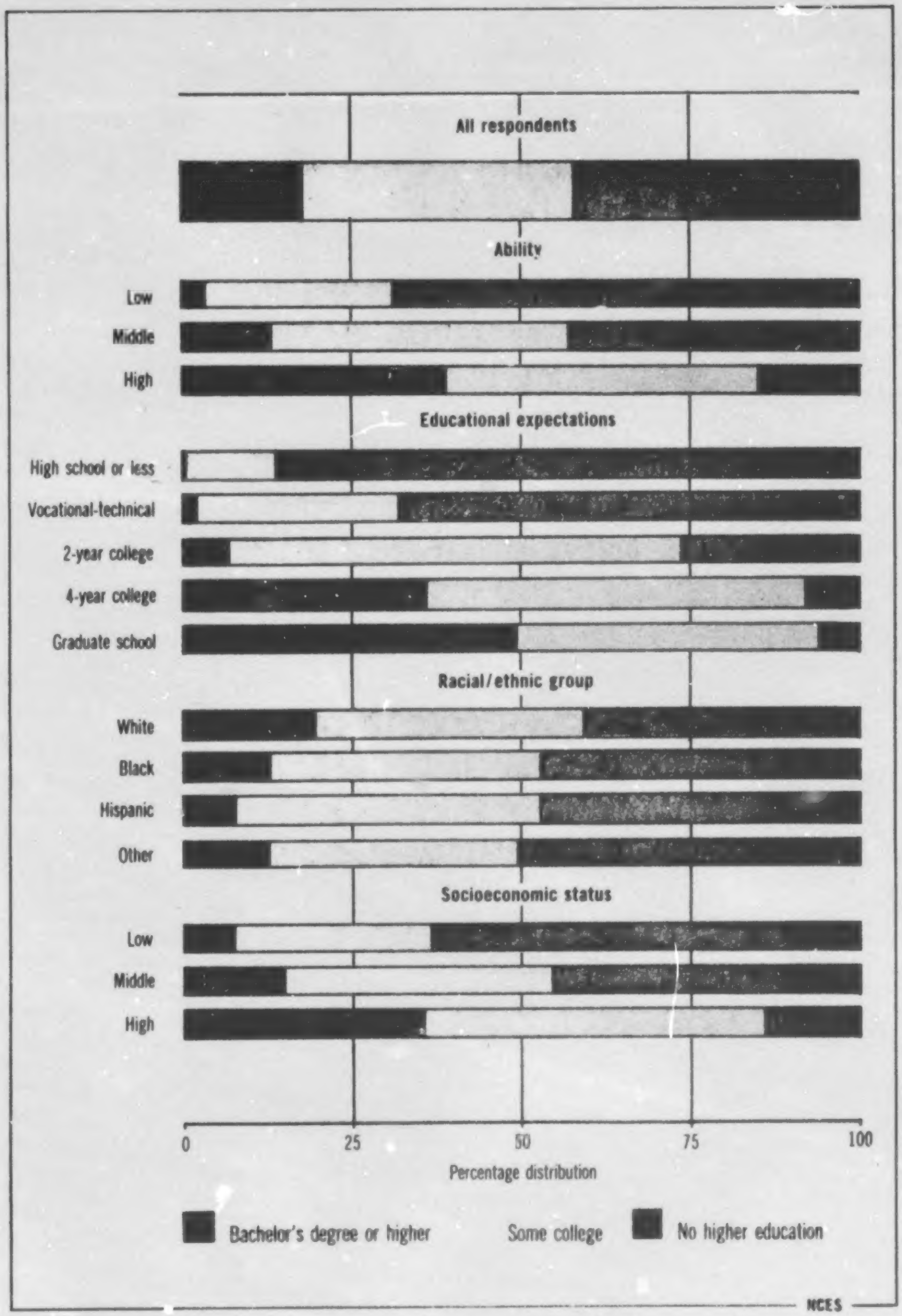
Non-white enrollment is greater at private than at public universities and 2-year institutions, but it is greater at public than at private 4-year institutions.

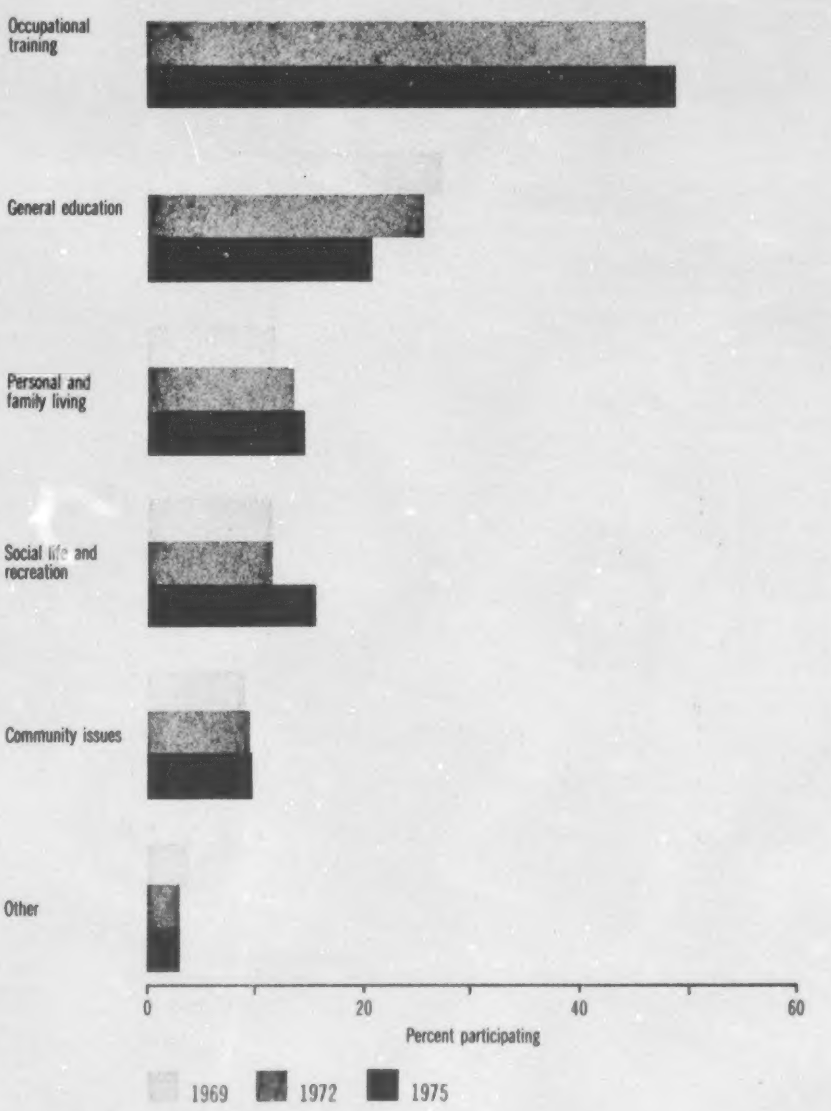


*Includes American Indian/Alaskan Native, Asian or Pacific Islander, and non-resident alien.

69

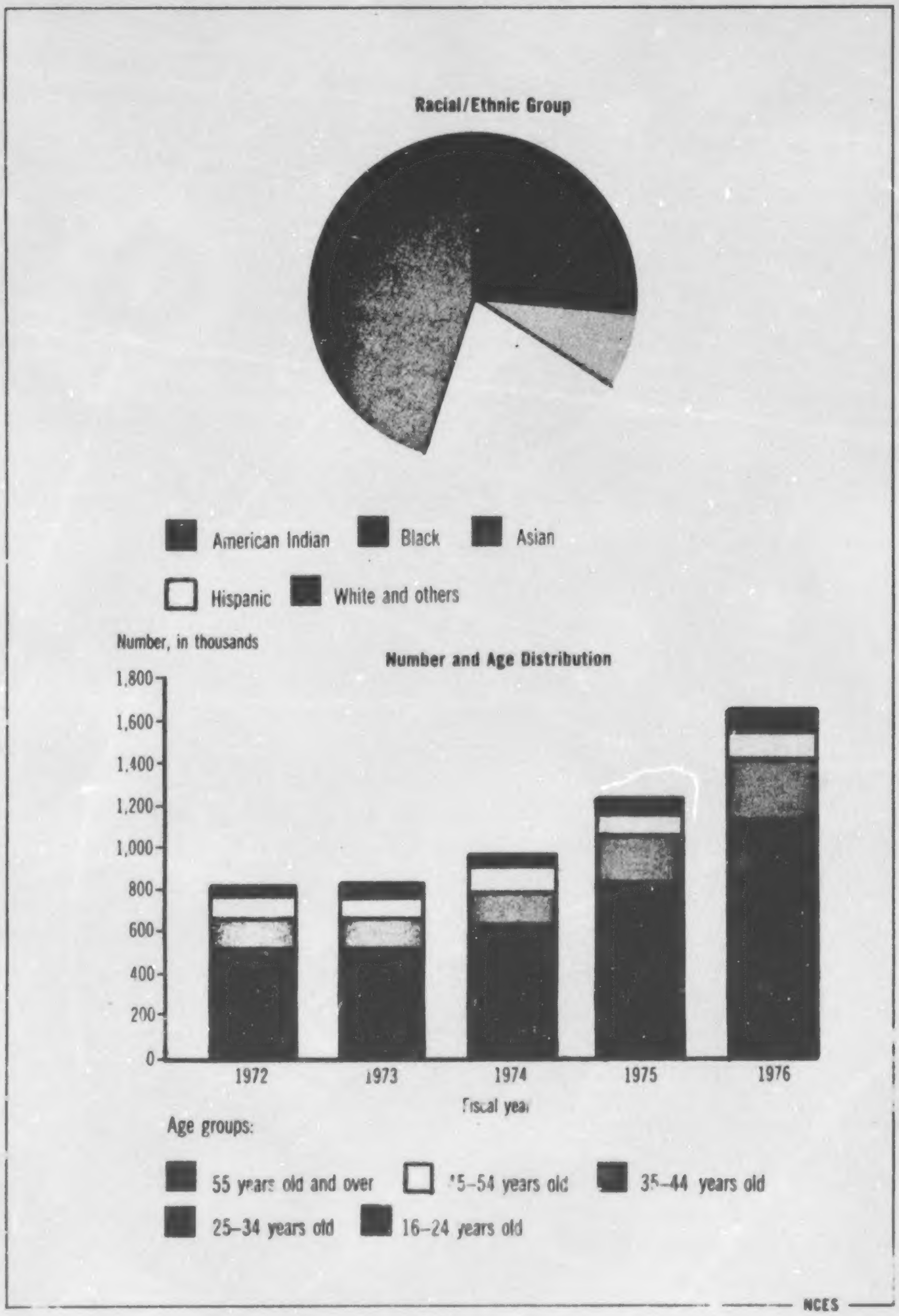

Number of institutional units
3,500
3,000
2,500
2,000
1,500
1,000
500
0
1970
1971
1972
1973
1974
1975
1976
1977
Academic year ending
Public 4-year
Public 2-year
Private 4-year
Private 2-year

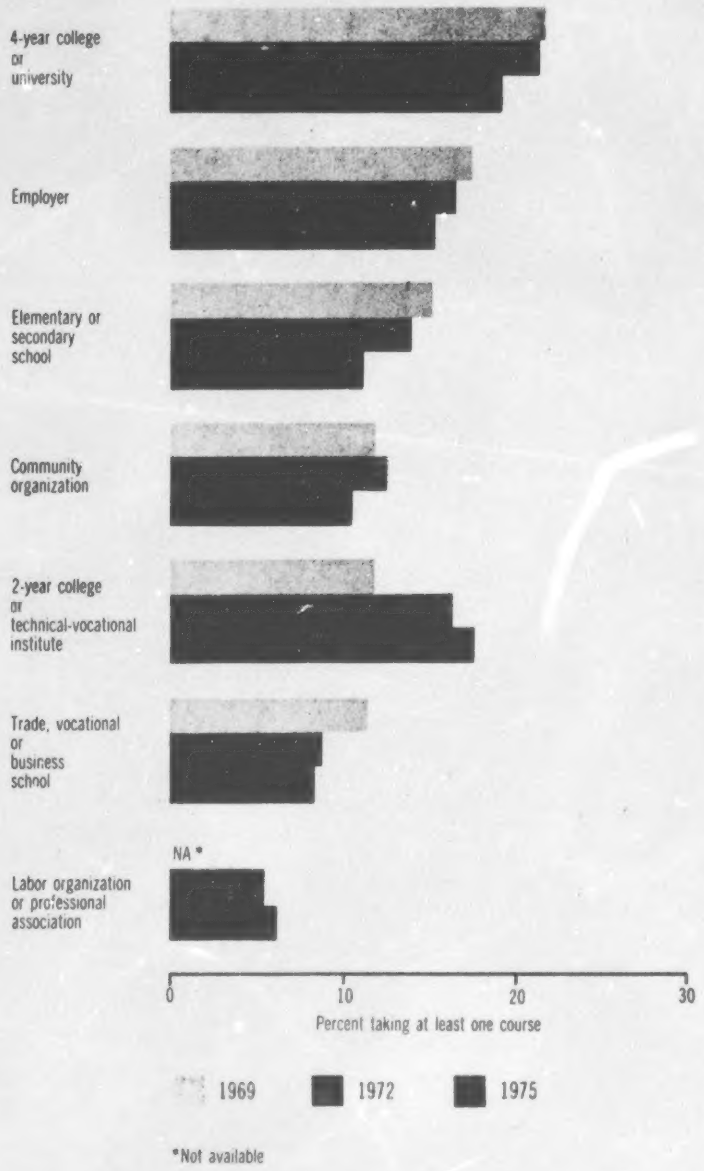

All respondents
Ability
Low
Middle
High
Educational expectations
High school or less
Vocational-technical
2-year college
4-year college
Graduate school
Racial/ethnic group
White
Black
Hispanic
Other
Socioeconomic status
Low
Middle
High
0
25
50
75
100
Percentage distribution
Bachelor's degree or higher
Some college
No higher education
NCES


Occupational training
General education
Personal and family living
Social life and recreation
Community issues
Other
0
20
40
60
Percent participating
1969
1972
1975

NCES

72

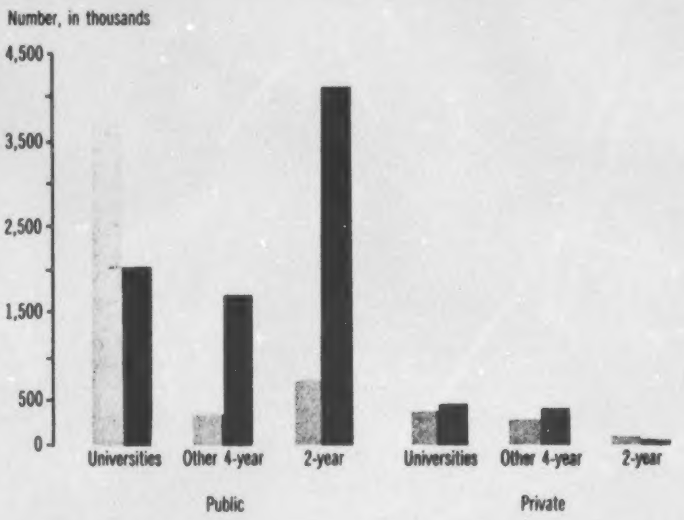

Racial/Ethnic Group
American Indian
Black
Asian
Hispanic
White and others
Number, in thousands
Number and Age Distribution
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
1972
1973
1974
1975
1976
Fiscal year
Age groups:
55 years old and over
45–54 years old
35–44 years old
25–34 years old
16–24 years old
NCES


4-year college or university
Employer
Elementary or secondary school
Community organization
2-year college or technical-vocational institute
Trade, vocational or business school
Labor organization or professional association
NA *
0
10
20
30
Percent taking at least one course
1969
1972
1975
*Not available

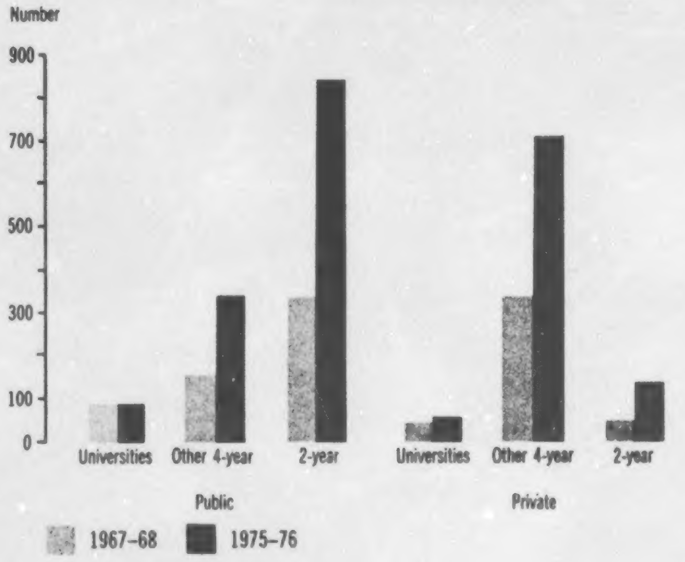
NCES

74

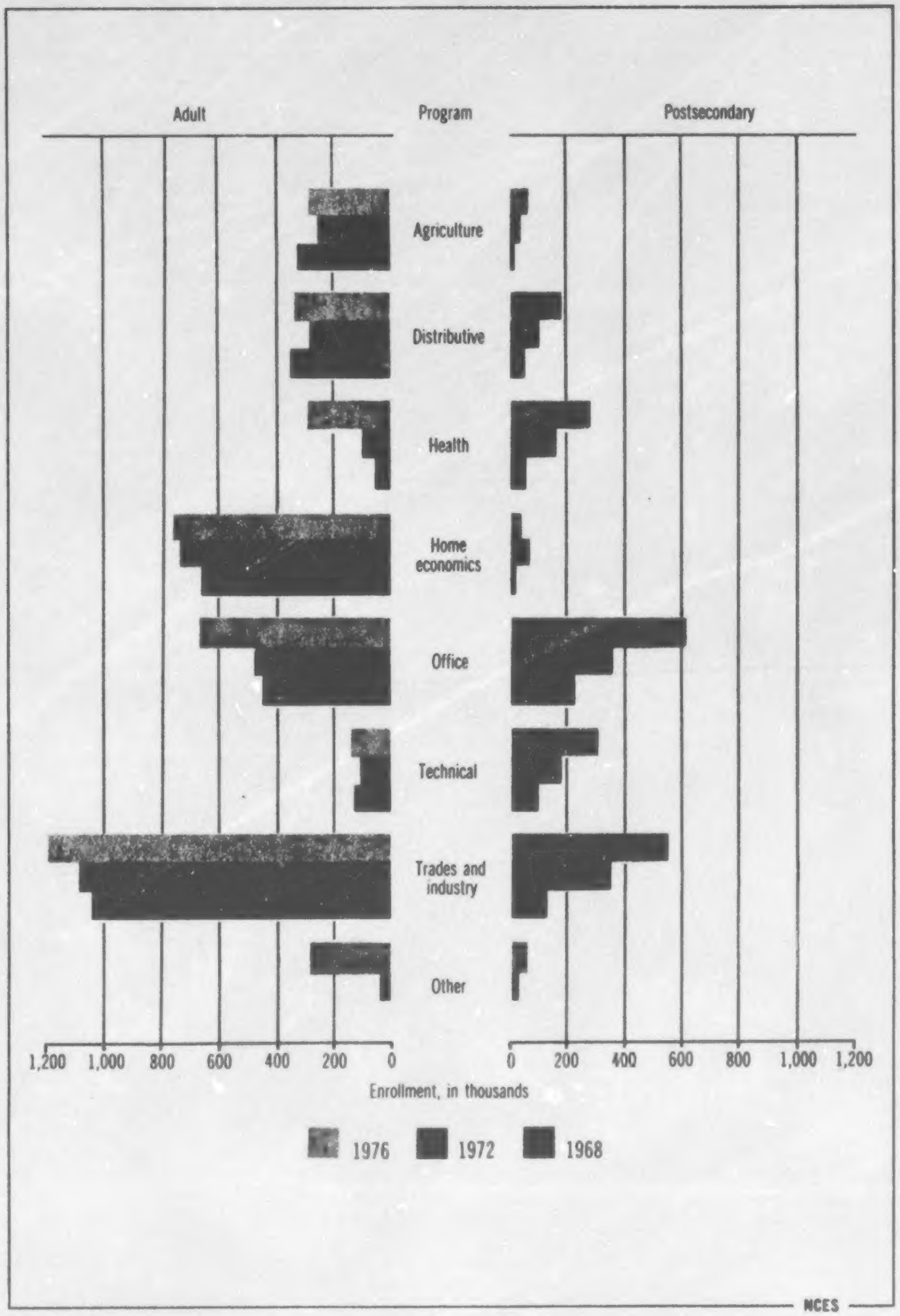
Registrations for noncredit activities in adult and continuing education



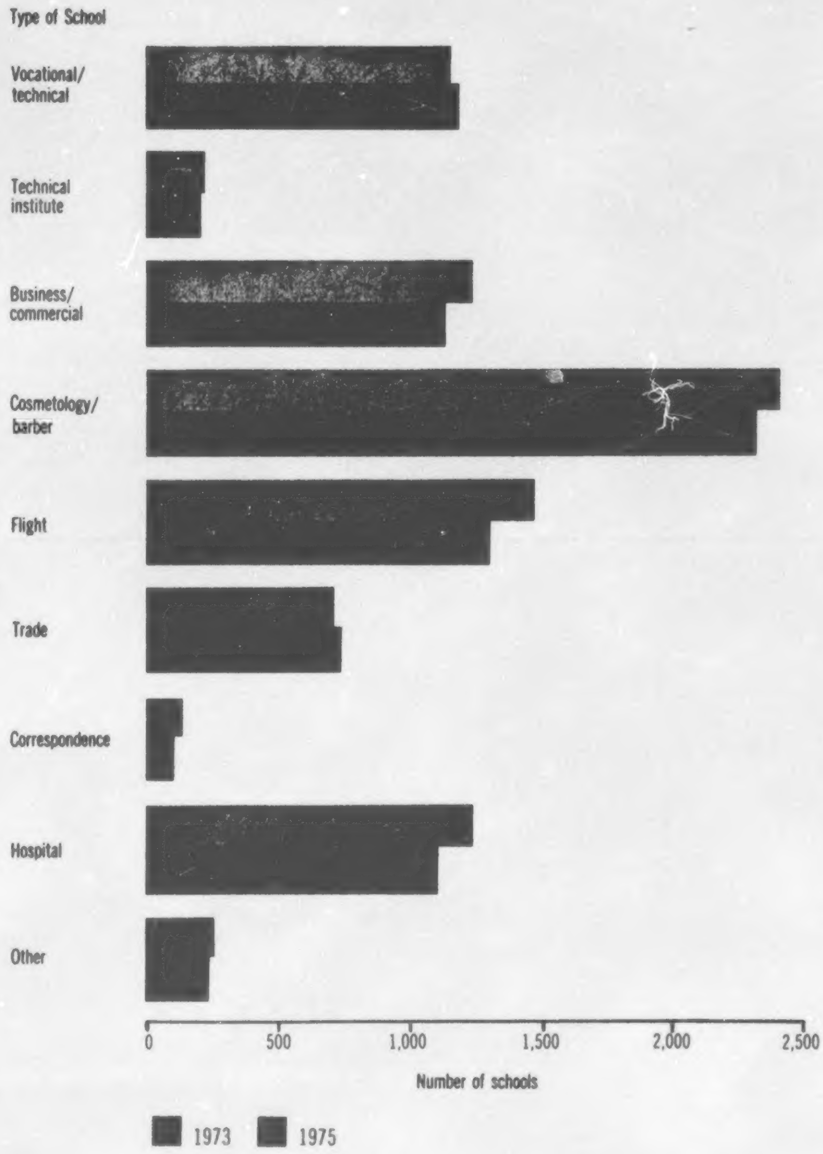
Number of institutions sponsoring noncredit activities in adult and continuing education



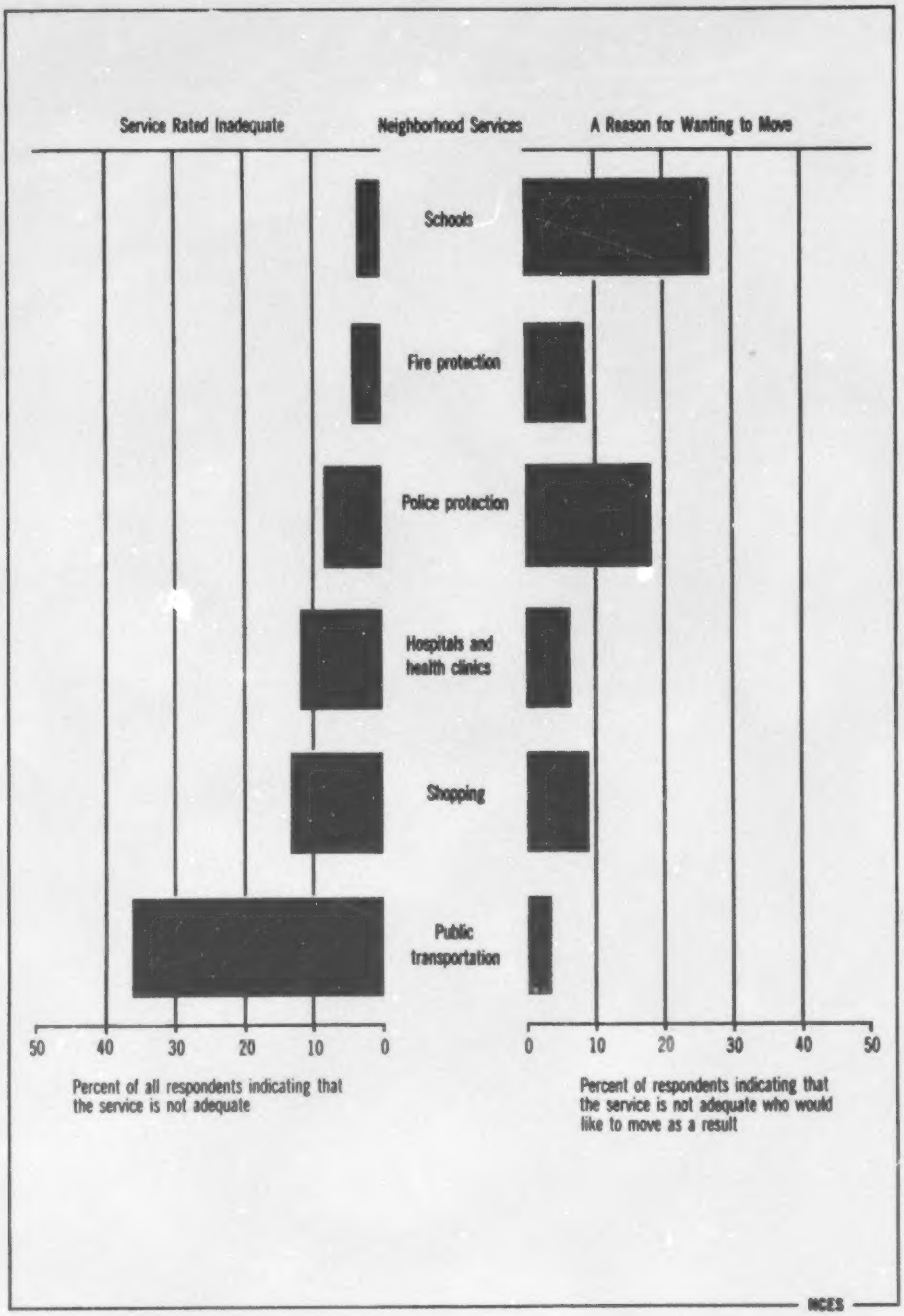
NCES


Adult
Program
Postsecondary
Agriculture
Distributive
Health
Home economics
Office
Technical
Trades and industry
Other
1,200
1,000
800
600
400
200
0
0
200
400
600
800
1,000
1,200
Enrollment, in thousands
1976
1972
1968
NCES

76

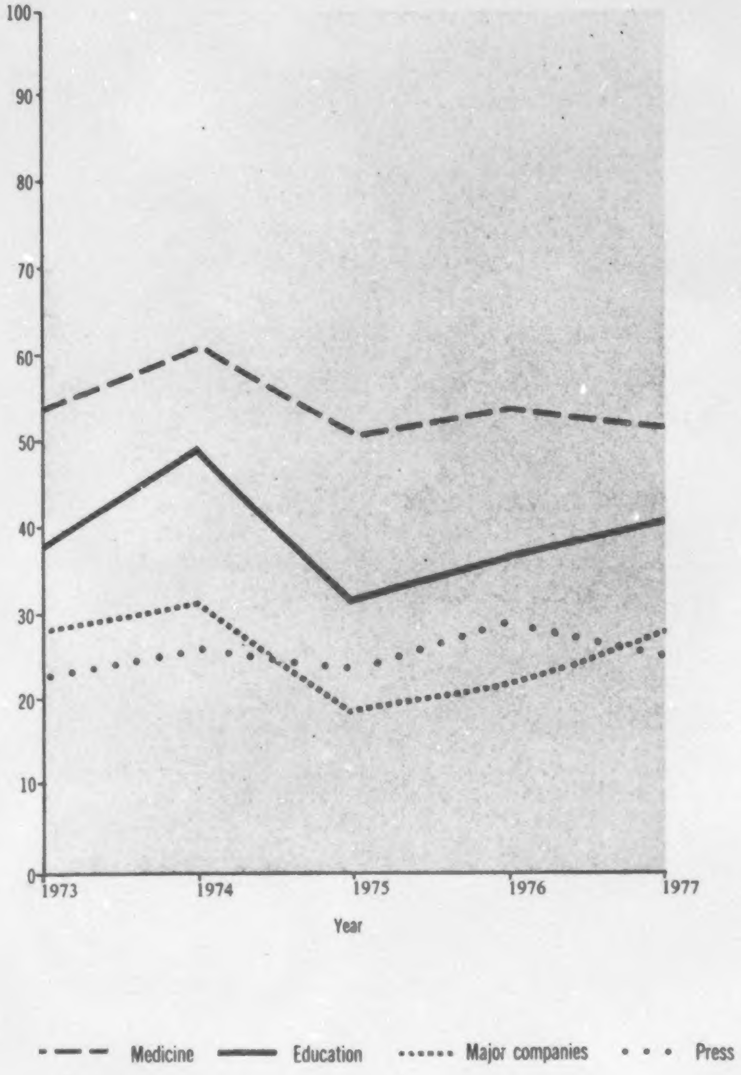

Type of School
Vocational/ technical
Technical institute
Business/ commercial
Cosmetology/ barber
Flight
Trade
Correspondence
Hospital
Other
0
500
1,000
1,500
2,000
2,500
Number of schools
1973
1975

NCES


Service Rated Inadequate
Neighborhood Services
A Reason for Wanting to Move
Schools
Fire protection
Police protection
Hospitals and health clinics
Shopping
Public transportation
50
40
30
20
10
0
0
10
20
30
40
50
Percent of all respondents indicating that the service is not adequate
Percent of respondents indicating that the service is not adequate who would like to move as a result
NCES

"I am going to name some institutions in this country. As far as the people running these institutions are concerned, would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in them?"

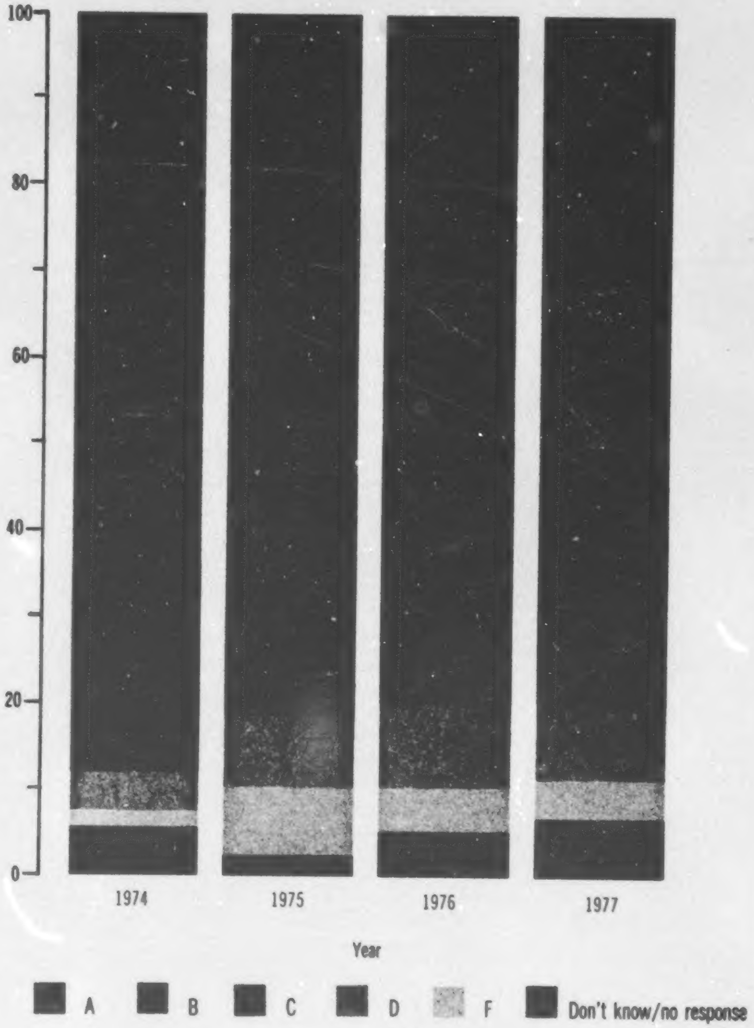
Percent of respondents expressing "a great deal of confidence"



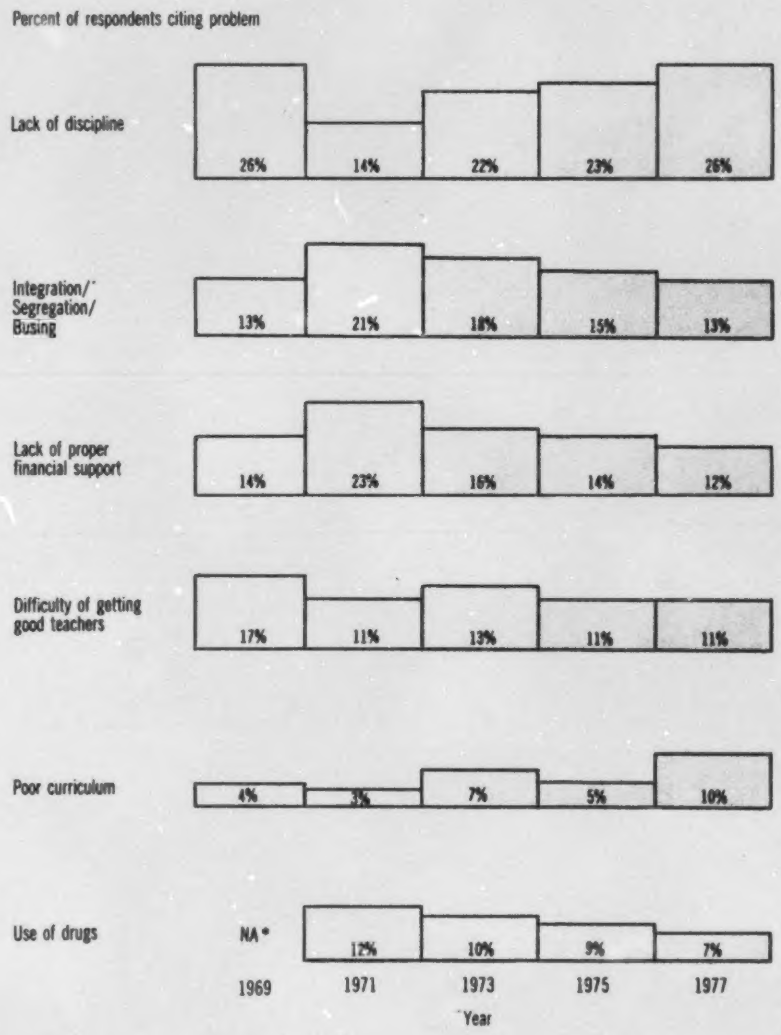
NCES

"Students are often given the grades A, B, C, D, and FAIL to denote the quality of their work. Suppose the public schools themselves, in this community, were graded in the same way. What grade would you give the public school here—A, B, C, D, or FAIL?"

Percentage distribution of responses given by parents of public school children



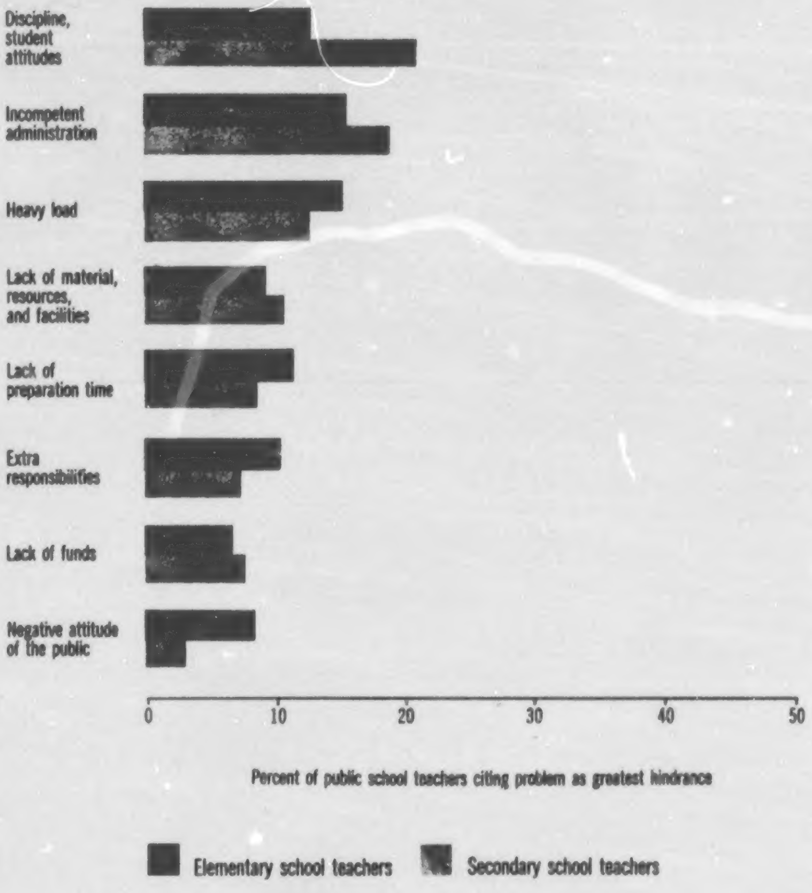
NCES



* Not available

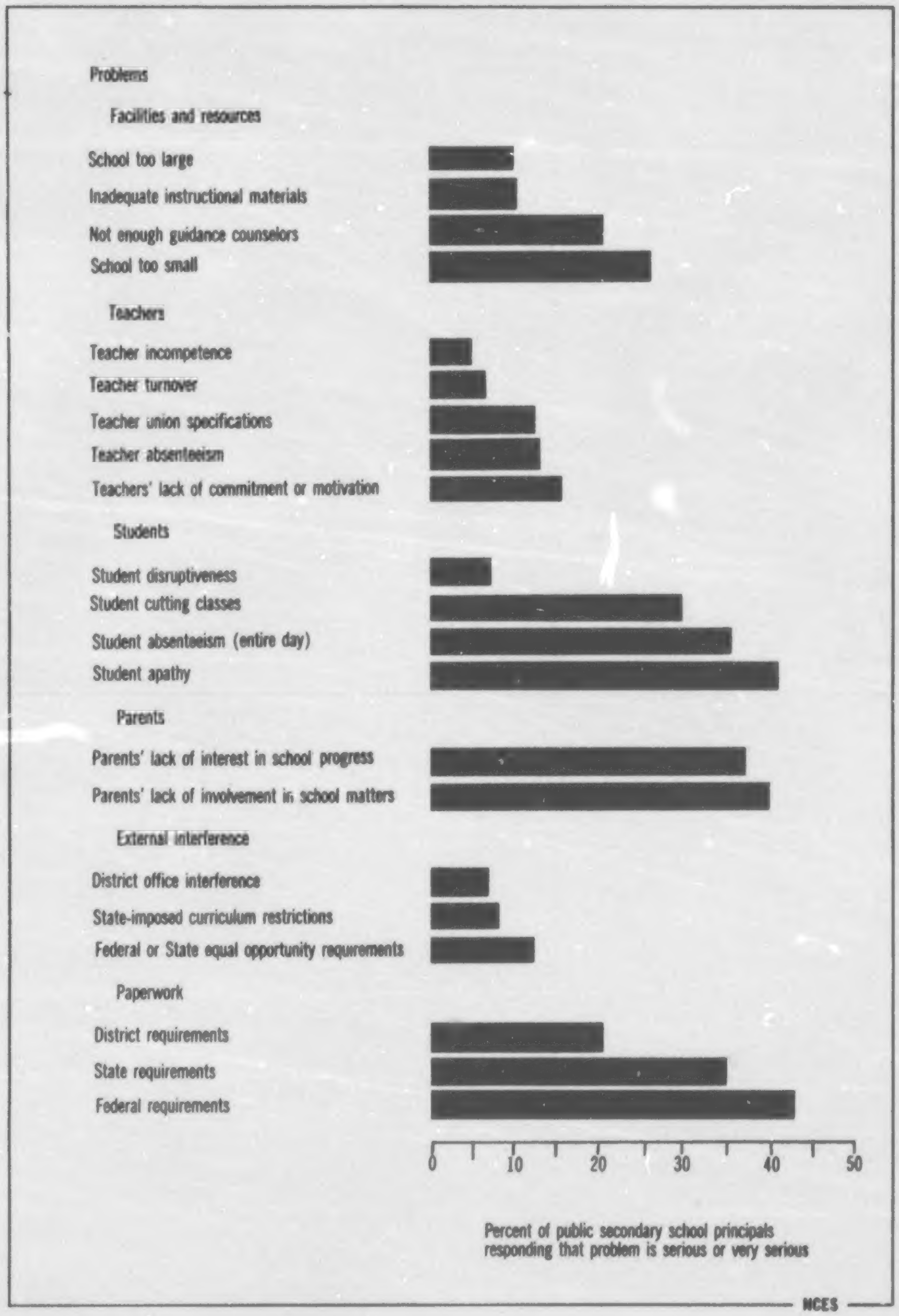
NCES

Question asked of public school teachers: "What in your present situation as a teacher hinders you most in rendering the best service of which you are capable?"



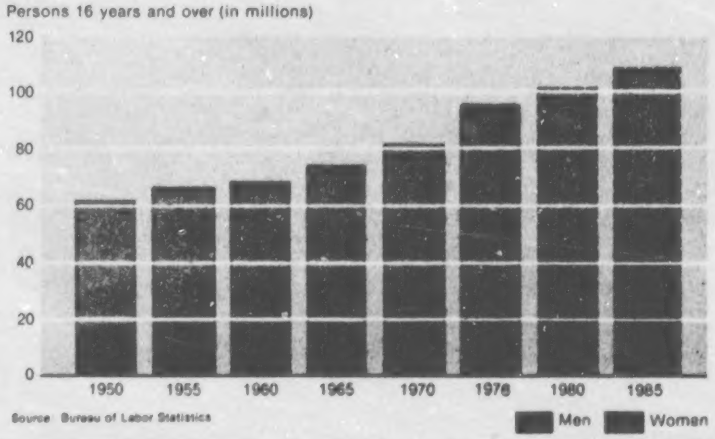
NCES

82


Problems
Facilities and resources
School too large
Inadequate instructional materials
Not enough guidance counselors
School too small
Teachers
Teacher incompetence
Teacher turnover
Teacher union specifications
Teacher absenteeism
Teachers' lack of commitment or motivation
Students
Student disruptiveness
Student cutting classes
Student absenteeism (entire day)
Student apathy
Parents
Parents' lack of interest in school progress
Parents' lack of involvement in school matters
External interference
District office interference
State-imposed curriculum restrictions
Federal or State equal opportunity requirements
Paperwork
District requirements
State requirements
Federal requirements
0
10
20
30
40
50
Percent of public secondary school principals responding that problem is serious or very serious
NCES

Civilian labor force growth, 1950-76 and projected 1980 and 1985

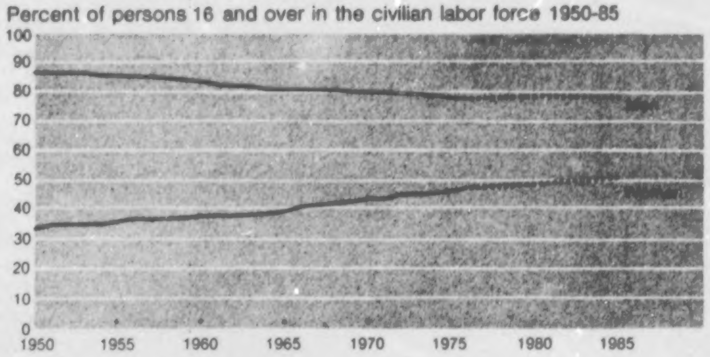
1



Source: Bureau of Labor Statistics

The percent of women who are in the labor force has been increasing, while the percent of men has been declining

2



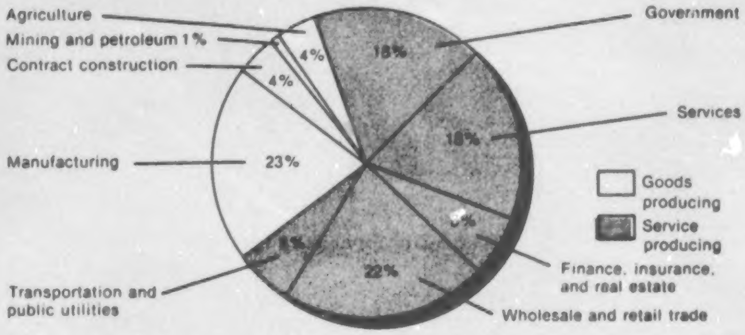
Source: Bureau of Labor Statistics

84

Where people work, 1976

3

Wage and salary workers except agriculture, which includes self-employed and unpaid family workers



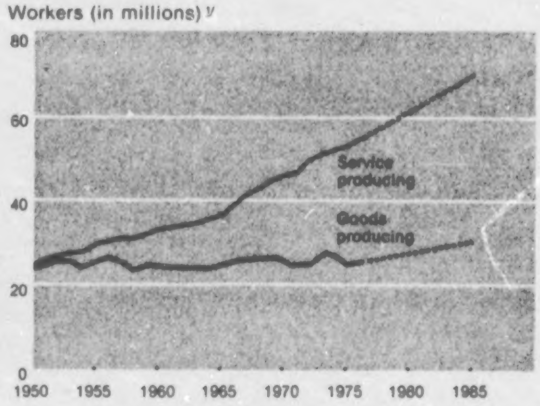
Source: Bureau of Labor Statistics

Industries providing services offer more jobs than those providing goods

4

Goods producing
- Manufacturing
- Agriculture
- Contract construction
- Mining

Service producing
- Trade
- Government
- Services
- Transportation and public utilities
- Finance, insurance and real estate



[1] Wage and salary workers, except agriculture, which includes self-employed and unpaid family workers.

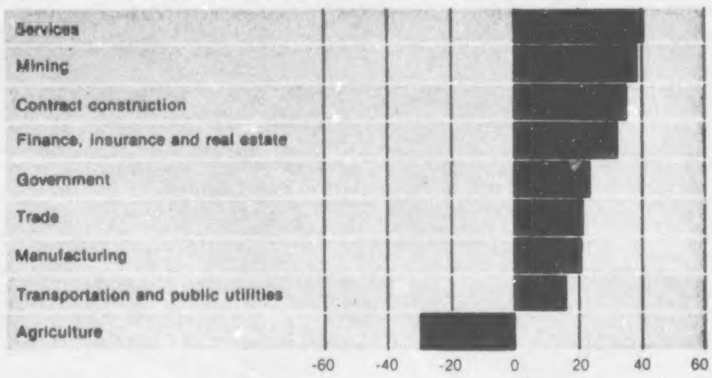
Source: Bureau of Labor Statistics

85

Through the mid-1980's employment growth will vary widely by industry

5

Percent change, 1976-85 projected

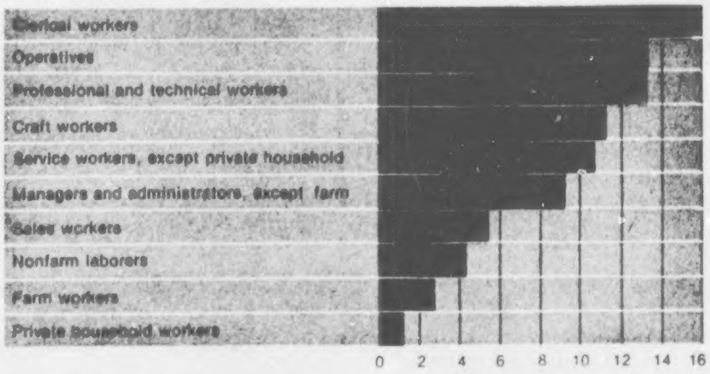


Source: Bureau of Labor Statistics

Employment in major occupational groups

6

Workers, 1976 (in millions)

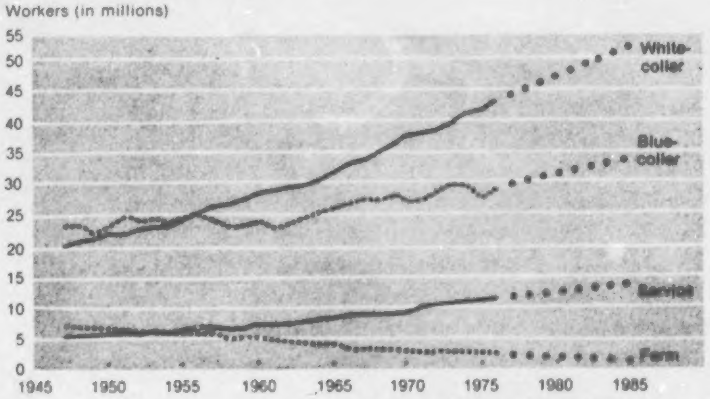


Source: Bureau of Labor Statistics

86

The shift toward white-collar occupations will continue through 1985

7

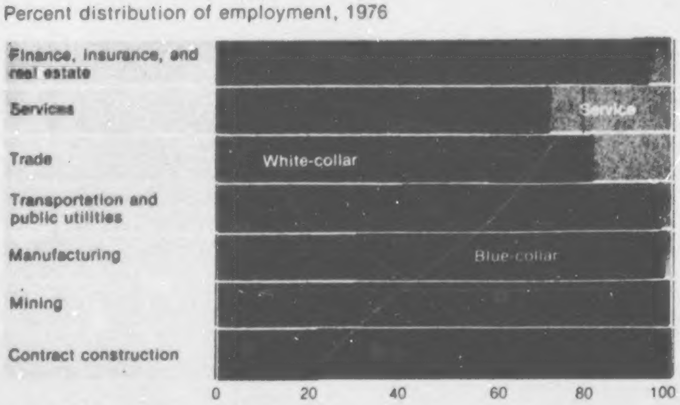


Source: Bureau of Labor Statistics

Note: 14- and 15- year olds are included prior to 1968 only.

Industries differ in the kinds of workers they employ

8

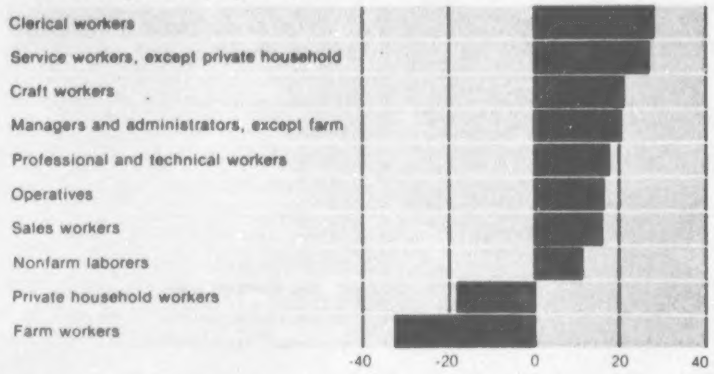


Source: Bureau of Labor Statistics

Through the mid-1980's employment growth will vary widely among occupational groups

9

Percent change in employment, 1976-85

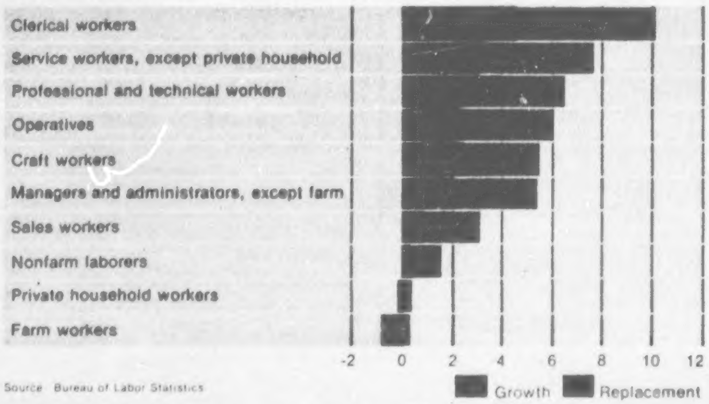


Source: Bureau of Labor Statistics

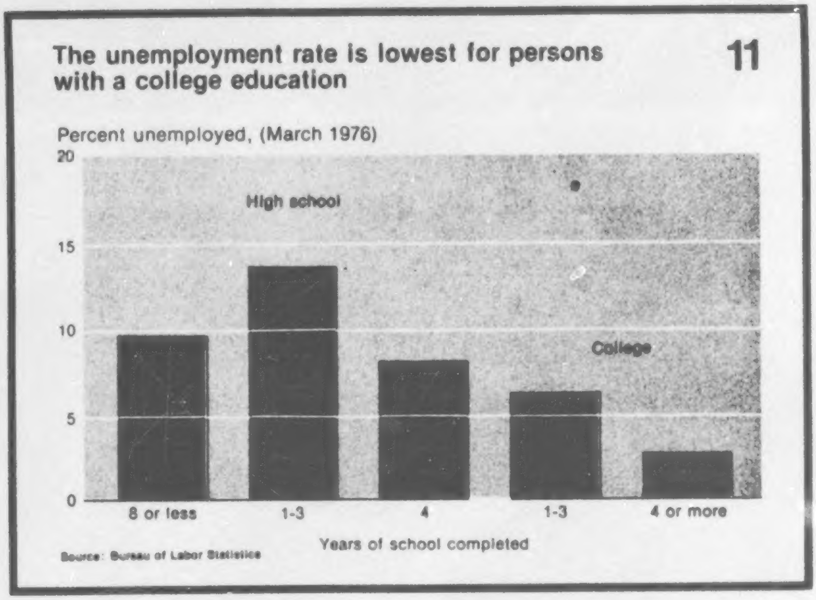
Job openings are determined by replacement plus growth

10

Workers needed—1976-85 (in millions)



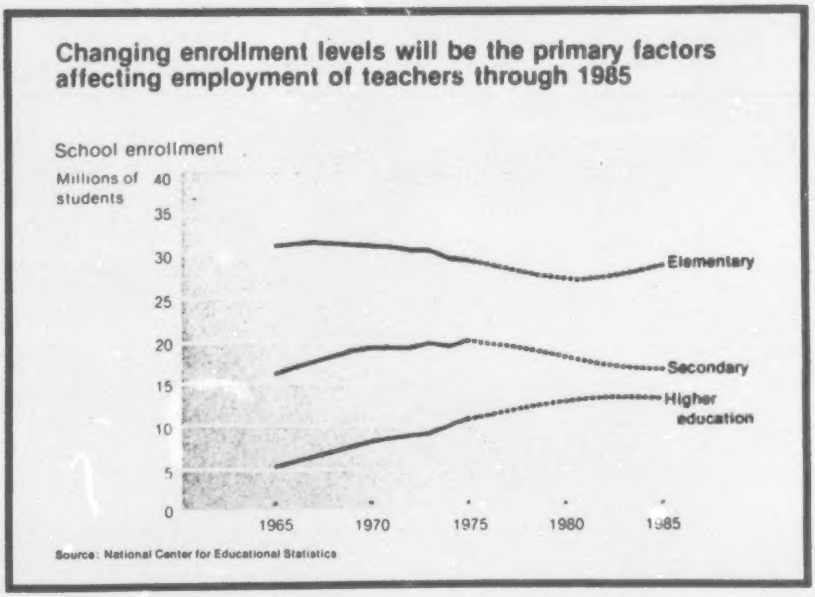
Source: Bureau of Labor Statistics



The unemployment rate is lowest for persons with a college education

11

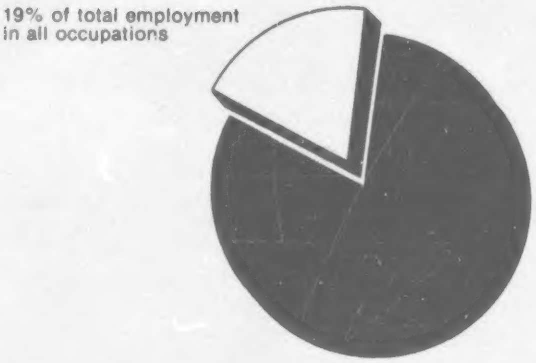
Source: Bureau of Labor Statistics



Changing enrollment levels will be the primary factors affecting employment of teachers through 1985

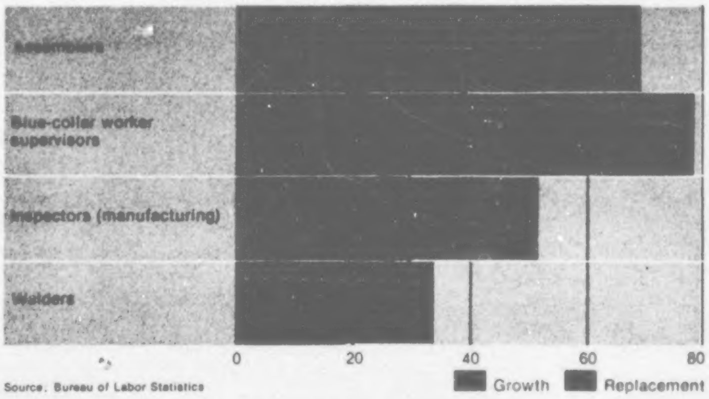
Source: National Center for Educational Statistics

Industrial production and related occupations, 1976

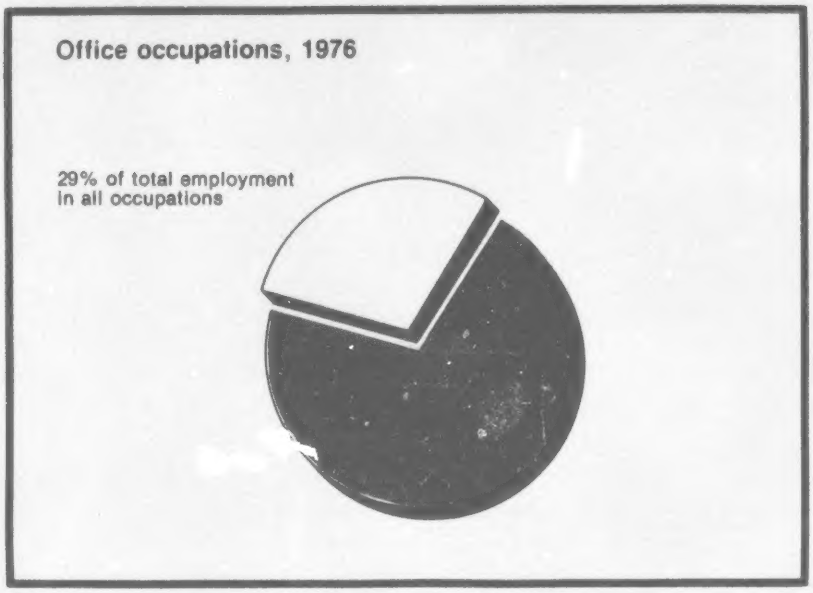


A very large number of jobs open each year in several industrial production and related occupations

Selected industrial production and related occupations
Average annual openings, 1976-85 (in thousands)

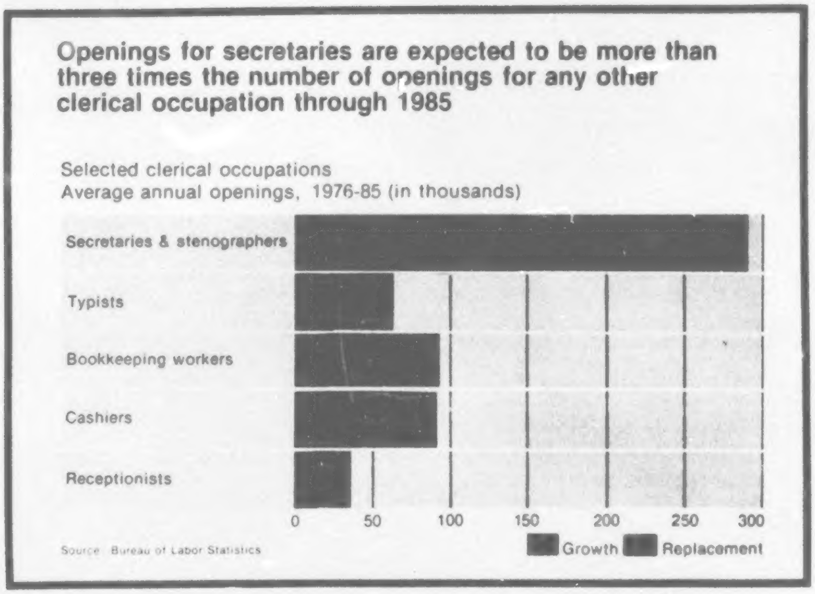


Source: Bureau of Labor Statistics



Office occupations, 1976

29% of total employment in all occupations

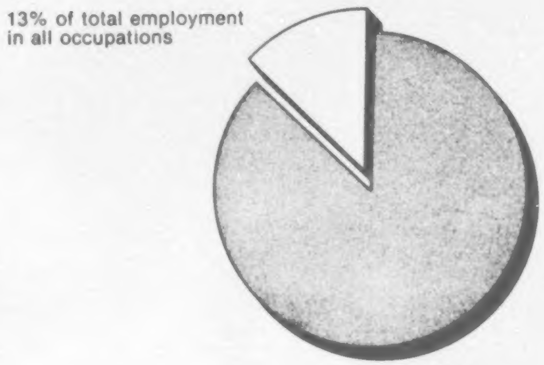


Openings for secretaries are expected to be more than three times the number of openings for any other clerical occupation through 1985

Selected clerical occupations
Average annual openings, 1976-85 (in thousands)

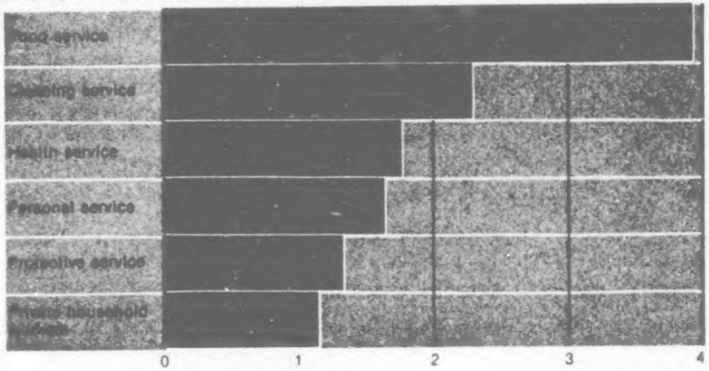
Source: Bureau of Labor Statistics

Service occupations, 1976



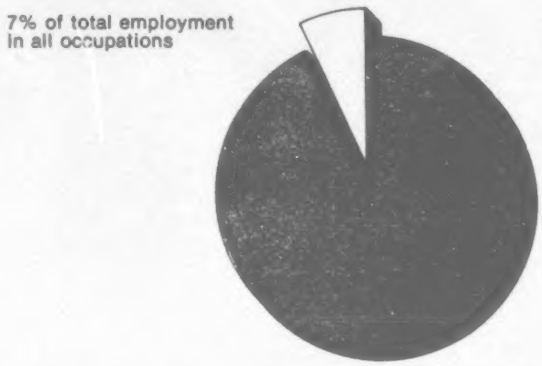
More than 12 million people work in service occupations

Employment, 1976 (in millions)



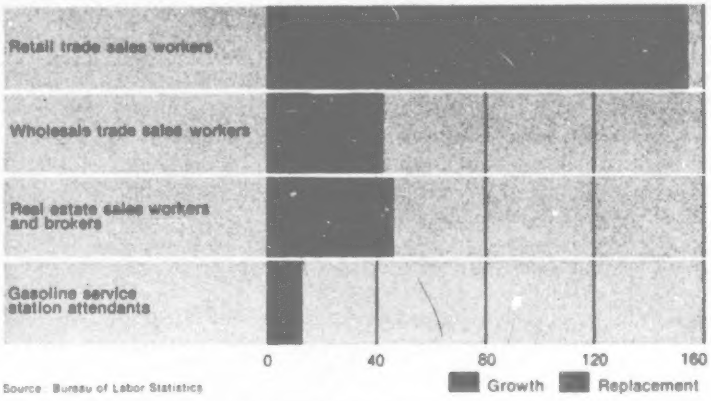
Source Bureau of Labor Statistics

Sales occupations, 1976



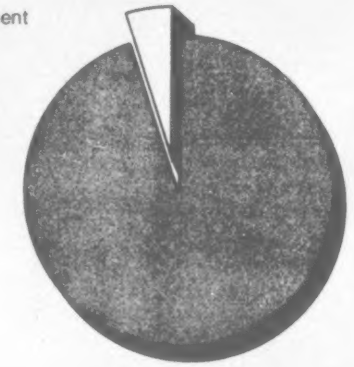
Openings for retail trade sales workers far outnumber openings for other sales workers

Selected sales occupations
Average annual openings, 1976-85 (in thousands)



Source: Bureau of Labor Statistics

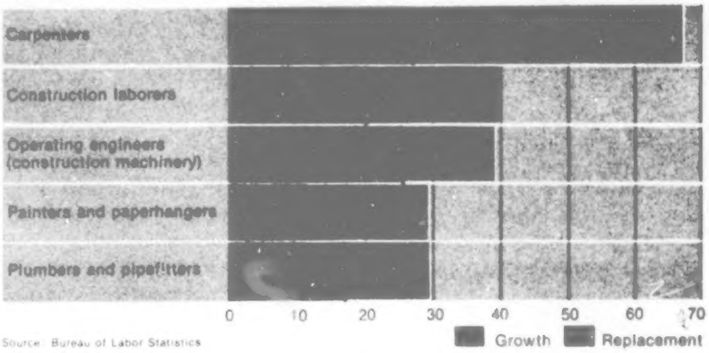
Construction occupations, 1976



5% of total employment in all occupations

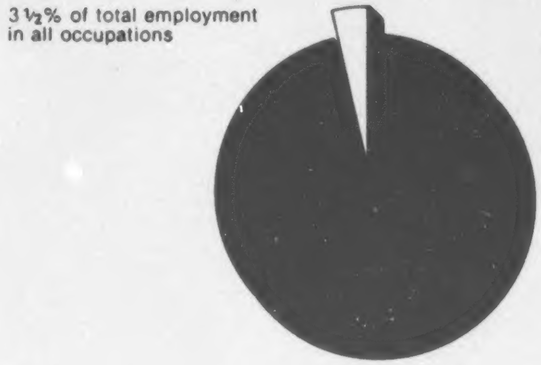
Employment growth and replacement needs will create large numbers of job openings in the construction occupations

Selected construction occupations
Average annual openings, 1976-85 (in thousands)



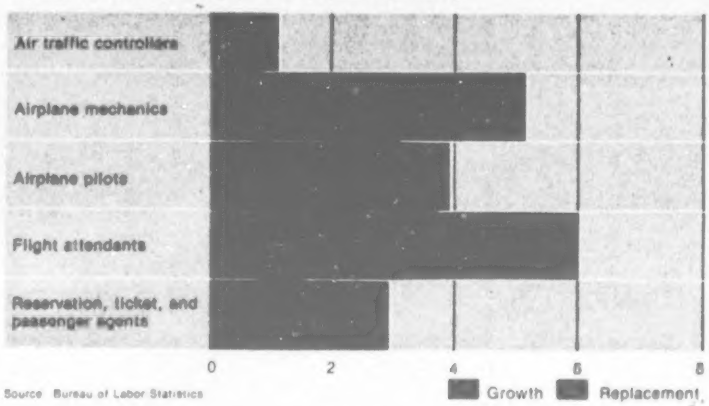
Source: Bureau of Labor Statistics

Occupations in transportation activities, 1976



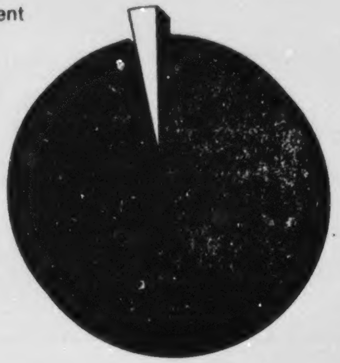
Keen competition is expected for the relatively small number of openings in air transportation occupations

Average annual openings, 1976-85 (in thousands)



Source: Bureau of Labor Statistics

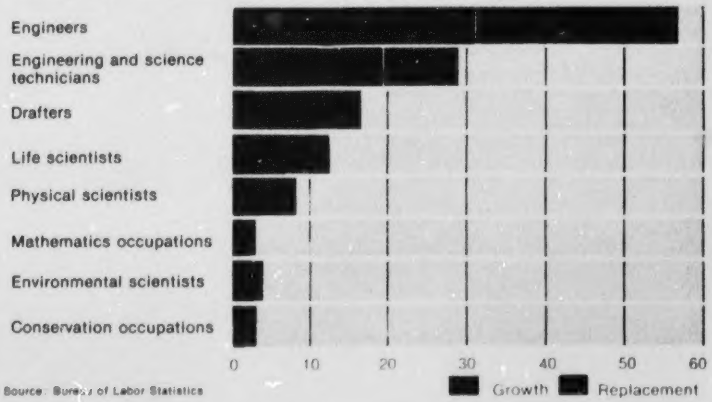
Scientific and technical occupations, 1976



3% of total employment in all occupations

The number of openings in scientific and engineering occupations varies greatly by occupational group

Average annual openings, 1976-85 (in thousands)



Source: Bureau of Labor Statistics

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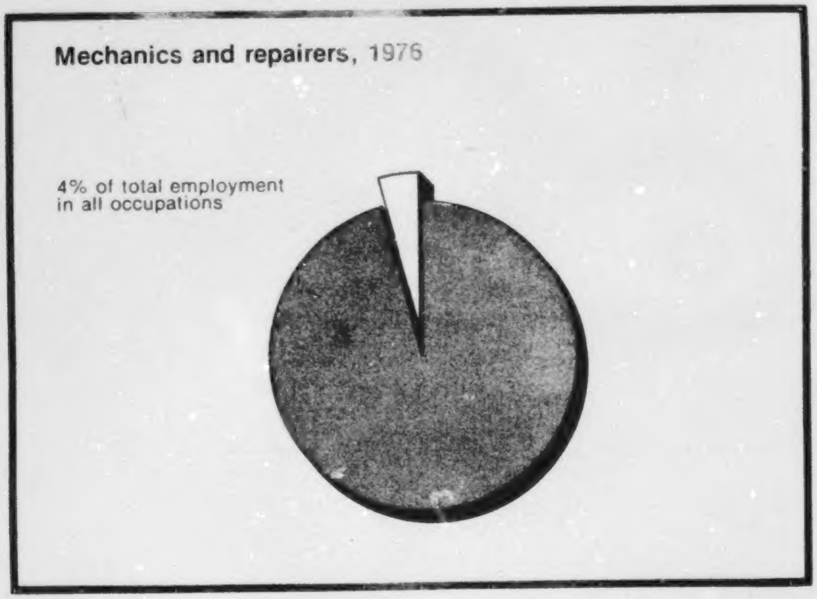
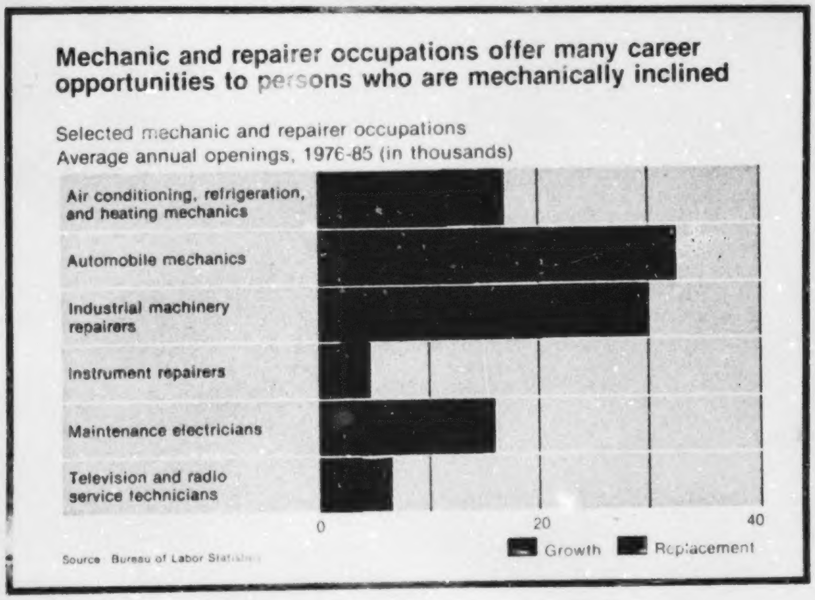


Mechanics and repairers, 1976

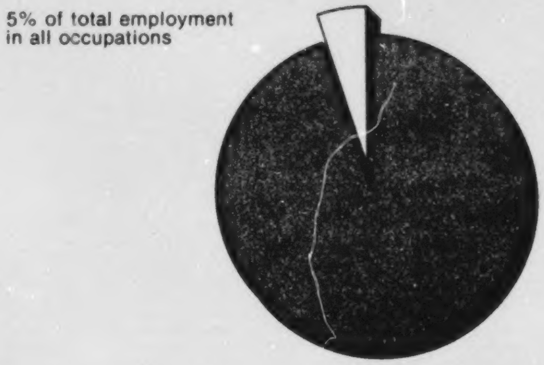


Mechanic and repairer occupations offer many career opportunities to persons who are mechanically inclined

Selected mechanic and repairer occupations
Average annual openings, 1976-85 (in thousands)

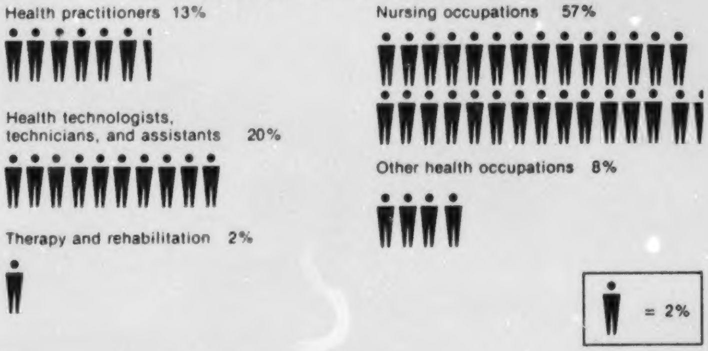
Source Bureau of Labor Statistics

Health occupations, 1976

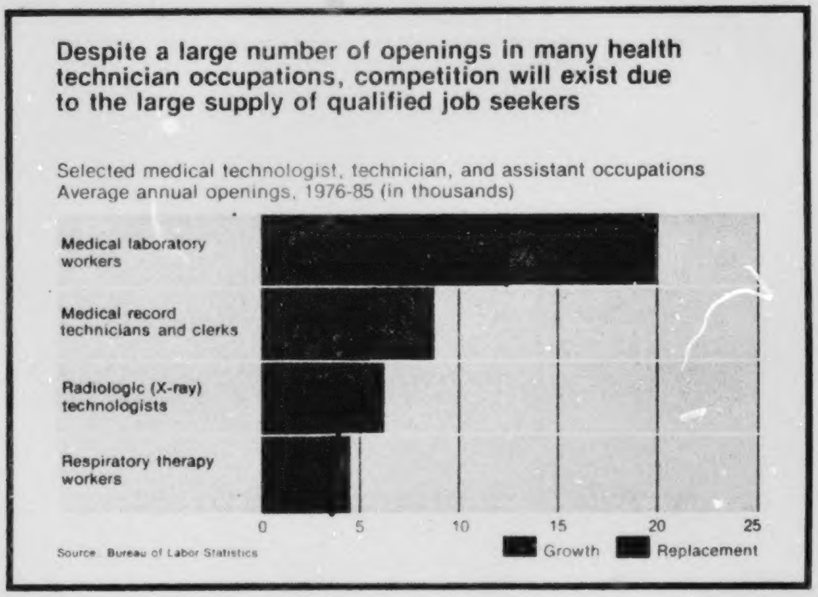


Seven nurses are employed for every two health practitioners

Distribution of employment among health occupations, 1976



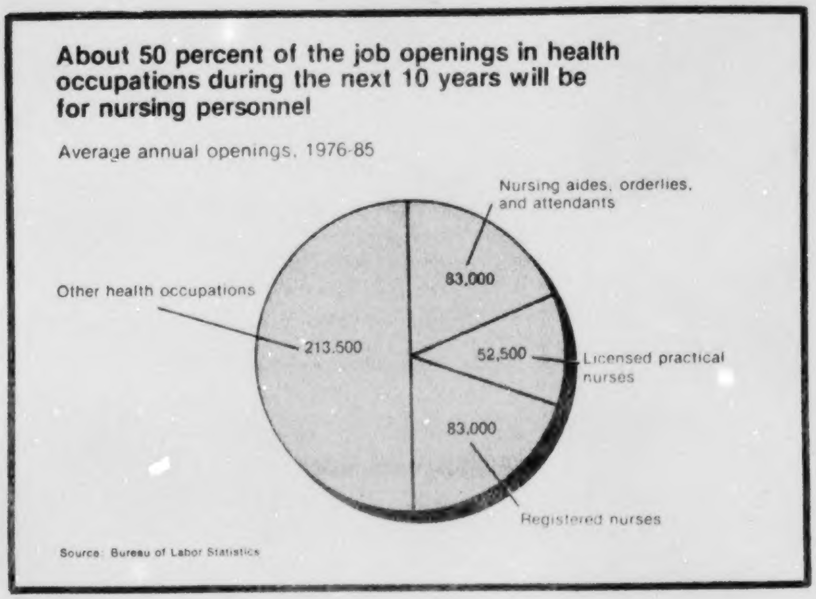
Source: Bureau of Labor Statistics



Despite a large number of openings in many health technician occupations, competition will exist due to the large supply of qualified job seekers

Selected medical technologist, technician, and assistant occupations
Average annual openings, 1976-85 (in thousands)

Source: Bureau of Labor Statistics

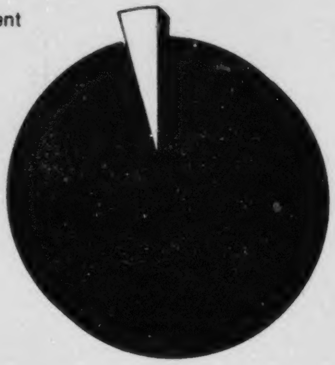


About 50 percent of the job openings in health occupations during the next 10 years will be for nursing personnel

Average annual openings, 1976-85

Source: Bureau of Labor Statistics

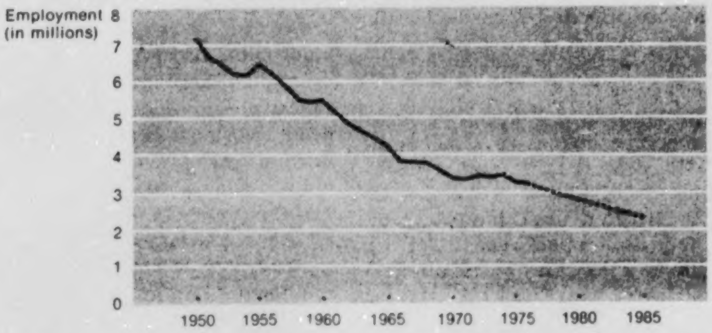
Agriculture, 1976



4% of total employment in all industries

Even though farm output has increased by 50 percent since 1950, employment has been cut in half and is expected to continue to decline

Farm employment,[1] 1950-76 and projected 1985

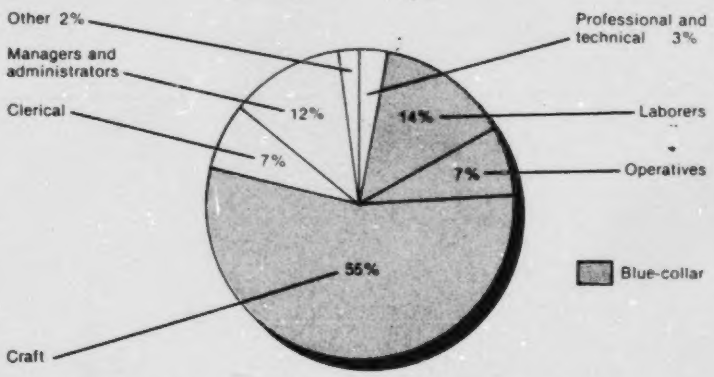


Source: Bureau of Labor Statistics

[1] Includes self-employed and unpaid family members

100

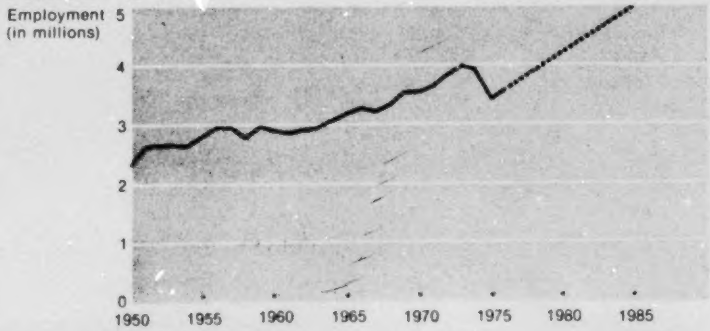
Four out of every five persons employed in contract construction in 1976 were blue-collar workers



Source: Bureau of Labor Statistics

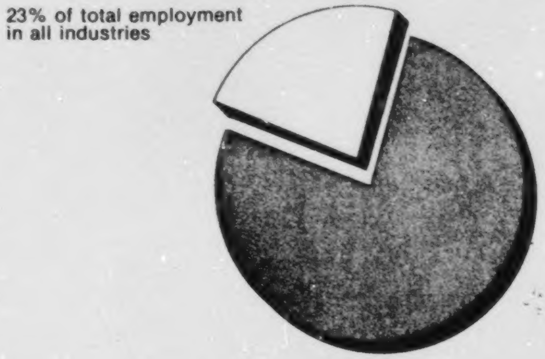
Although employment in the construction industry fluctuates with the state of the economy, the trend through 1985 shows growth

Wage and salary workers in contract construction, 1950-76 and projected 1985

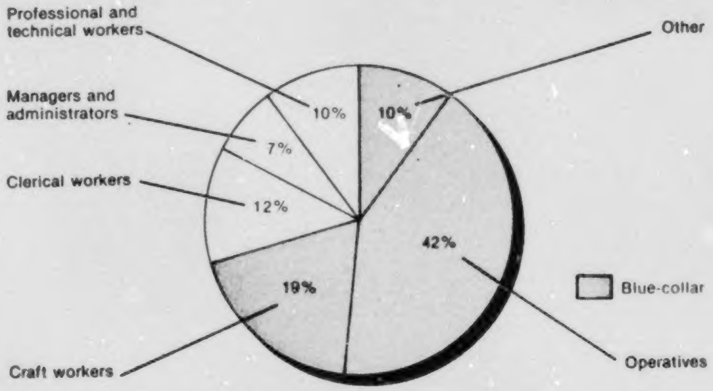


Source: Bureau of Labor Statistics

Manufacturing, 1976



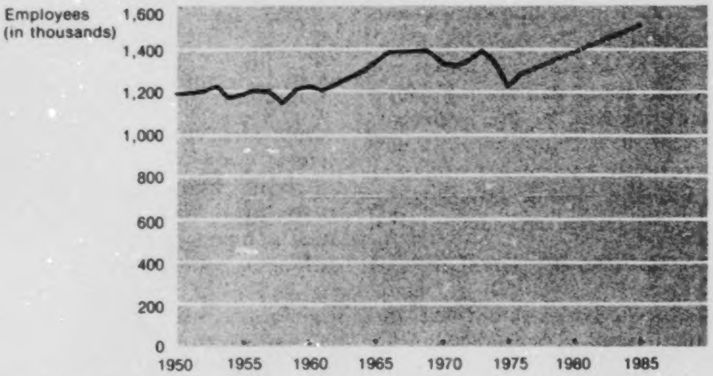
Seven out of every ten employees in the manufacturing industry in 1976 were blue-collar workers



Source: Bureau of Labor Statistics

The number of jobs in the apparel industry fluctuates with the economy

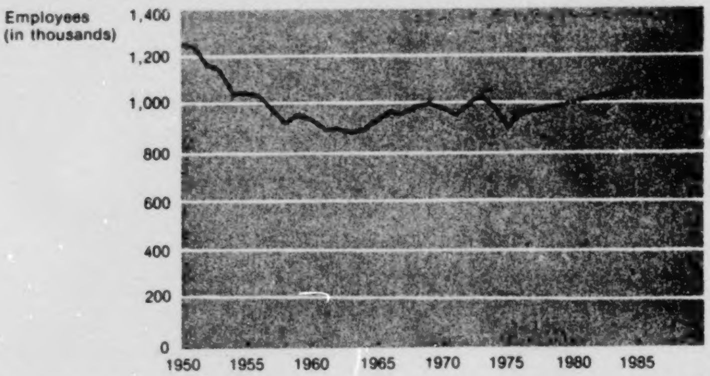
Wage and salary workers in the apparel industry, 1950-76 and projected 1985



Source: Bureau of Labor Statistics

Employment in textile manufacturing, which declined in the 1950's, is expected to continue at recent levels

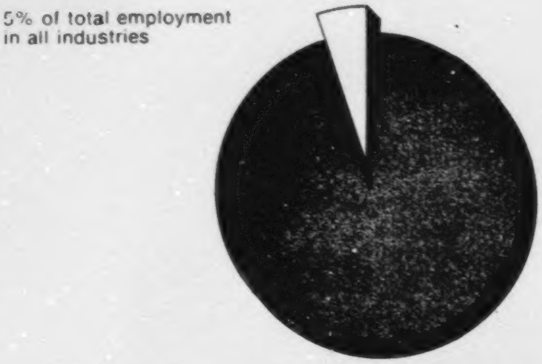
Wage and salary workers in textile mill products manufacturing, 1950-76 and projected 1985



Source: Bureau of Labor Statistics

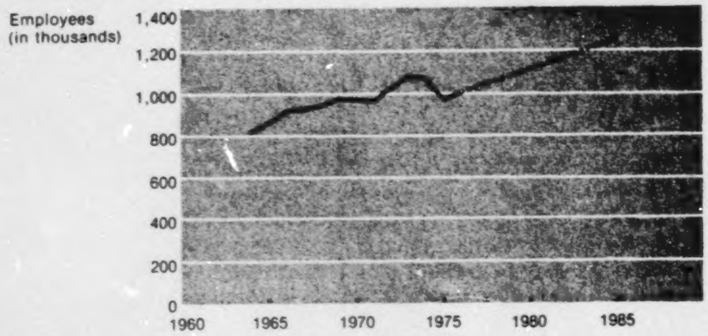
Transportation, communications, and public utilities, 1976

5% of total employment in all industries



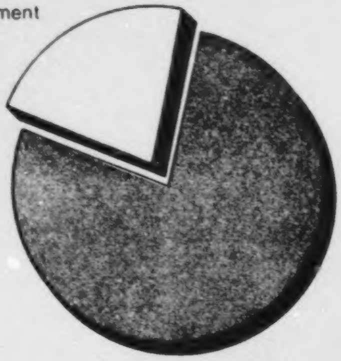
Substantial long-term employment growth is expected in the trucking industry, although declines may occur during economic downturns

Wage and salary employees in trucking and trucking terminals, 1964-76 and projected 1985



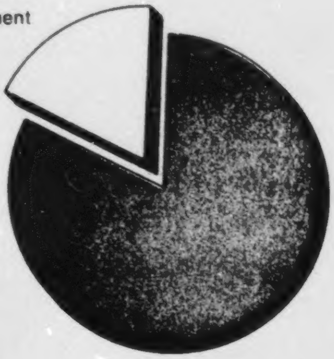
Source: Bureau of Labor Statistics

Wholesale and retail trade, 1976



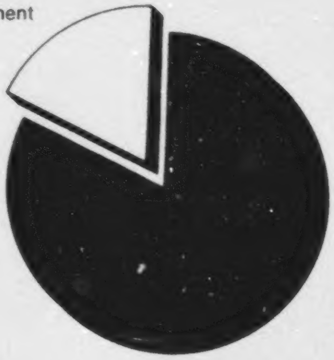
22% of total employment in all industries

Service industries, 1976



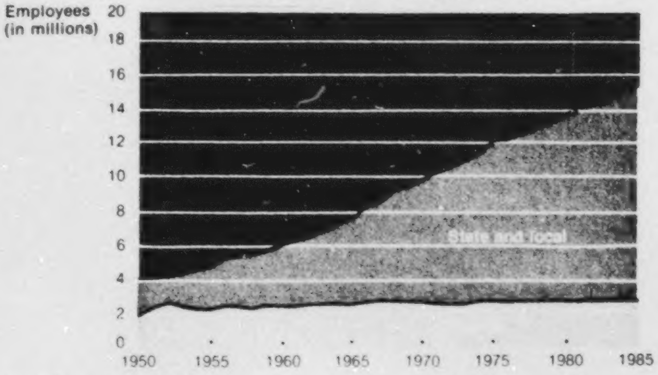
18% of total employment in all industries

Government (including public education), 1976



Almost all of the growth in government employment is at the State and local level

Civilian government employment,[1] 1950-76 and projected 1985



Source: Bureau of Labor Statistics

[1] Includes public education

STATE CONTEXT

This component, which describes the context in which vocational and technical education function in South Carolina, comprises four major sections. The first of these describes the state's general and school population and economic characteristics and includes, for purposes of comparison, both national and state data for the general population and economic indicators. This is followed by a detailed description of the organization and governance of the vocational education, technical education, and manpower systems in South Carolina. The third section presents economic projections for the state through 1985 and describes the employment outlook for each sector of the economy. The final section is a summary of South Carolina legislation since 1917 affecting vocational and technical education.

As in the National Overview, much of the information presented in the State Context applies to education in general. But the primary concern in selecting and presenting the data was to describe the environment - social, economic, and legal - in which vocational and technical education exist in South Carolina, and the broader application of some the data does not detract from their value.

POPULATION AND ECONOMIC CHARACTERISTICS

All indicators that are described herein are based on the latest available data. The collection date for each indicator is given with the data description. In all instances, a year such as 1976 will refer to a calendar year, and 1976-77 will refer to a school year or fiscal year, beginning July 1 and ending June 30.

General and school indicators are illustrated for both population and economic characteristics. National data have been provided for each general indicator and state data for both general and school indicators.

Sources for data that were used are identified in the attached bibliography.

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POPULATION CHARACTERISTICS: GENERAL

		South Carolina	United States
1.	Total Population Estimates as of 7/1/76	2,848,000	215,118,000
2.	Population Density (Persons Per Square Land Mile), 1976 Estimates	94.2	60.7
3.	Percent Urban and Rural, 1970		
	Urban	47.6	73.5
	Rural	52.4	26.5
	Total	100.0	100.0
4.	Composition by Race and Sex		
	Estimates as of 7/1/76		
	Percent White	68.9	86.7
	Percent Black & Other	31.1	13.3
	Total	100.0	100.0
	Estimates as of 7/1/76		
	Percent Male	48.7	48.8
	Percent Female	51.3	51.2
	Total	100.0	100.0
5.	Composition of 1976 Estimated Resident Population by Age Group		
	Age in Years		
	0–4	8.3	7.1
	5–17	24.5	23.2
	18–44	40.3	38.6
	45–64	18.6	20.4
	65 and above	8.4	10.7
	Total	100.1*	100.0

* Detail does not add to total due to rounding.

	South Carolina	United States
6. Birth and Death Rates, Final for S. C., 1976 Estimates for U. S., 1975		
Live Births Per 1,000 Persons	16.7	14.8
Total Deaths Per 1,000 Persons	8.3	9.0
7. Final Marriage, Divorce and Annulment Rates, S. C., 1976 U. S., 1975		
Marriages Per 1,000 Persons	17.8	10.1
Divorces and Annulments Per 1,000 Persons	3.7	4.9
8. Median School Years Completed by Persons 25 Years Old and Over, 1970		
Male	10.3	12.1
Female	10.6	12.1
Both	10.5	12.1

9. Percentage Distribution of Male/Female Population 25 Years Old and Over by Years of School Completed, 1970

	South Carolina		United States	
Years Completed	Male	Female	Male	Female
Less than 1	3.0	2.3	1.6	1.6
1-8	37.3	33.7	27.9	25.6
9-12	41.7	47.4	46.3	54.2
13 and over	18.0	16.6	24.2	18.7
Total	100.0	100.0	100.0	100.1 *

	South Carolina	United States
10. Median Age of S. C. Population, 1970		
White	27.1	28.9
Nonwhite	19.1	22.7
Total	24.8	28.1

* Detail does not add to total due to rounding.

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	South Carolina	United States
11. Percent of the Male/Female Population 16 Years Old or Over in Labor Force, 1970		
Male	77.6	76.6
Female	45.3	41.4
12. Percent of Male/Female Population 16 and 17 Years Old In Labor Force as Compared to Total 16 and 17 Year Olds, 1970		
Male	35.1	35.7
Female	16.9	23.0

ECONOMIC CHARACTERISTICS: GENERAL

	South Carolina	United States
1. Per Capita Personal Income 1976 (By Residence)	$5,147	$6,399
2. Percent Distribution of Total Personal Income by Major Components, 1976 (Wages and Salaries, Proprietors Income, Property Income, Transfer Payments)*		
Labor and Proprietors Income by Source Components:		
Manufacturing	26.3	19.7
Contract Construction	4.9	4.4
Government	16.9	13.5
Other Components	24.1	32.1
Subtotal	72.3 **	69.7

* 1975 update is not totally compatible with previous data (1972). Current source document displays income components by place of work, and total income is adjusted and shown by place of residence.

** Detail does not add to total due to rounding.

		South Carolina	United States
Proprietors Income:			
	Farm	1.2	1.3
	Non-Farm	4.7	5.1
	Subtotal	5.9	6.4
Property Income:			
	Subtotal	10.9	13.8
Transfer Payments:			
	Subtotal	14.1	14.0
Less Contributions for Social Insurance and Residence Adjustments		– 3.1	– 4.0
	Total	100.1 *	99.9 *
3. Total Number of Housing Units as of 1975 and Percent Increase Since 1970 (5–Year Period)			
	April 1, 1970	815,123	68,627,366
	April 1, 1975 (EST.)	863,000	71,537,000
	Change	47,877	2,909,634
	Percent Change	5.9	4.2
4. Median Family Income by Race, 1969			
	White	$8,760	$9,957
	Black	4,443	6,063
	Total	7,620	9,586
5. Per Capita Gross Debt at End of FY 1975		$330.68	$339.57 **

* Detail does not add to one hundred due to rounding internally.

** Figures representing the average debt for fifty states.

		South Carolina	United States
6. Projected Average Annual Labor Force, Employment and Unemployment in Thousands and Unemployment as a Percent of the Labor Force, 1976 (Preliminary)			
	Civilian Labor Force	1,255	94,773
	Total Employment	1,168	87,485
	Unemployment	87	7,288
	Percent Unemployment	6.9	7.7
7. Total Personal Income **in Millions** for 1976, 1975 and Percent Increase from **1975 to 1976**			
	1976	$14,662	$1,373,511
	1975	13,093	1,246,501
	Percent Increase	12.0	10.2
8. Residential Construction Permits **in Millions**, 1976, 1975 and Percent Increase from **1975 to 1976**			
	1976	$ 678	$ 43,651
	1975	542	31,261
	Percent Increase	25.1	39.6
9. Non-Residential Construction Permits **in Millions**, 1976, 1975 and Percent Change from **1975 to 1976**			
	1976	$ 519	$ 30,045
	1975	297	31,647
	Percent Change	42.8	– 5.1

POPULATION CHARACTERISTICS: SCHOOL (SOUTH CAROLINA)

1. Public School Enrollment Trends, Grades 1-12, Special Education and Ungraded*

Year	1972-73	1973-74	1974-75	1975-76	1976-77
Enrollment	641,987	626,916	621,794	618,920	617,420

2. Public School Enrollment Projections, Grades 1-12, Special Education and Ungraded*

Year	1977-78	1978-79	1979-80	1980-81	1981-82
Enrollment	609,405	600.538	590,720	581,021	570,292

3. Total Private School Enrollment Trends

Year	1972-73	1973-74	1974-75	1975-76	1976-77
Enrollment Grades K-12 (Less K Only Schools)	46,805	47,060	47,598	47,788	48,757
Grades K-12 (Inc. K Only Schools)	–	–	51,464	51,669	53,016
Grades 1-12 Only	42,840	42,628	42,958	44,111	44,733

4. Private School Enrollment Projections

From 1976-77 to 1979-82 (Grades 1–12 Only)	44,111

5. State Supported Kindergarten Enrollment Trends, 1972-73 through 1976-77

Year	1972-73	1973-74	1974-75	1975-76	1976-77
Enrollment	10,624	18,048	23,423	30,946	34,791
% of 5 Yr. Olds	21.4%	36.7%	46.5%	59.2%	65.7%

6. Enrollment Trends, Vocational Education, 1972-73 through 1976-77 **

Year	1972-73	1973-74	1974-75	1975-76	1976-77
Enrollment	103,493	105,794	118,940	135,528	144,531

* Excludes Felton Lab and S. C. Youth Services.

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** Student enrollment is duplicated across program areas.

7. Enrollment Trends, Programs for the Handicapped, 1972-73 through 1976-77

Year	1972-73	1973-74	1974-75	1975-76	1976-77
Enrollment	42,064	59,454	67,042	73,157	81,780

8. Enrollment Trends, Adult Education, 1972-73 through 1976-77 (Basic and High School)

Year	1972-73	1973-74	1974-75	1975-76	1976-77
Enrollment	67,476	71,983	85,422	82,451	74,773

9. Public School Size According to Average Daily Membership, Fall 1976

Smallest School	21 *
Largest School	3,359 *
Mean School	583 *

10. The Percent of Students Above and Below the Expected Age as of 11/1 for Specific Grades 1 through 12, Fall 1975

	Percents			
Grade	Below	Expected	Above	Total
1	--	90.04	9.96	100
2	2.66	82.24	15.10	100
3	2.85	81.31	15.84	100
4	2.90	76.35	20.75	100
5	3.43	70.31	26.26	100
6	2.94	71.37	25.69	100
7	3.56	67.65	28.79	100
8	3.59	64.46	31.95	100
9	3.27	60.63	36.10	100
10	4.39	60.75	34.86	100
11	5.33	67.04	27.63	100
12	9.43	65.79	24.78	100

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* Special education schools were excluded from compilation.

ECONOMIC CHARACTERISTICS: SCHOOL FINANCE (SOUTH CAROLINA)

1. Average and Quartiles of Total Annual Salary for Academic Positions 1976-77

Average for the State	$10,507
Low district average	7,964
First quartile of district averages	9,538
Second quartile of district averages (median district)	10,062
Third quartile of district averages	10,781
High district averages	11,619

2. Average and Quartiles of Supplement from Other Funds Paid to State Aid Academic Positions, 1976-77

Average for the State	$ 1,752
Low district average	154
First quartile of district averages	998
Second quartile of district averages (median district)	1,380
Third quartile of district averages	1,966
High district average	2,687

3. Average Salary for Superintendents and Supervisory Principals, 1976-77

Superintendents' Salaries	$25,740
Supervisory Principals' Salaries	$16,458

4. Annual Salary Distribution, 1976-77 for County, District, Area and Assistant Superintendents and Elementary and Secondary Principals (in dollars)

	Low Salary	1st * Quartile	2nd Quartile (Median Salary)	3rd * Quartile	High Salary	Average Salary
County Superintendents	9,341	10,250	14,135	14,938	17,760	13,090
District Superintendents	17,390	21,188	24,617	28,813	42,250	25,599
Area Superintendents	12,000	20,000	21,596	23,538	31,662	21,683
Secondary Principals	12,813	16,930	18,481	20,091	28,246	18,598
Elementary Principals	10,359	15,081	16,459	17,757	22,795	16,393

5. Total and Percent of Revenue Received From All Sources, 1976-77

Source	Total Amount	Percent
State	$449,202,180	53
Local	282,964,117	33
Federal	118,369,162	14
Total	$850,535,459	100

* Calculated from frequency distribution for those who are full time personnel.

6. Current Per Pupil and Percent Funds Expended at State and District Levels for Education, 1976-77 (Less Adult Ed., Non-Public Schools, and Public Library Expenditures)

Source	Total Amount	Per Pupil	Percent
District Level	$605,202,757	$1,072	84
State Level	115,948,390	206	16
Total	$721,151,147	$1,278	100

7. The Percent of the State Budget Allocated to Public Elementary and Secondary Education in Original Appropriations

Year	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78
Percent Allocated	31.7	30.1	28.0	25.5	25.6	26.4 32.5 **

8. Total Amount of Bonds Issued During 1976-77 School Year and the Amount Per Pupil in ADA

Total	$17,678,162
Per Pupil	31.33

9. The Highest, Lowest, and Average Revenue Received Per Pupil (with ratio of extremes) for the Following in 1976-77: a) Local Revenue, b) State Revenue, c) Federal Revenue, d) Total (in dollars)

	Districts		State	
	High	Low	Average	Ratio
a	1,178.54	113.63	395.27	10.37:1
b	623.10	452.11	524.16	1.38:1
c	516.55	63.57	201.86	8.13:1
d	1,900.90	854.33	1,121.30	2.23:1

10. Tax Levy in Mills, 1976-77

Median of Districts	97.00

11. Assessed Valuation Per Pupil, 1976-77

State Average	$3,569

** Includes Employee Benefits which appear in 1978 Fiscal Year Appropriations for Education.

ORGANIZATION

1. Number of School Districts in South Carolina, 1976-77

92

2. District Size According to Student Enrollment, 1976-77

Smallest District	498
Largest District	53,951
Mean	6,711
Median	3,938

3. Median Size of School Districts in Square Miles, 1976-77

198

4. Total Number of Schools (Includes 9 Kindergarten Schools, 27 Special Education Schools and 53 Area Vocational Centers), 1976-77

1,163

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ORGANIZATION AND GOVERNANCE OF VOCATIONAL EDUCATION

INTRODUCTION

The fundamental aim underlying the system of vocational education in South Carolina is to deliver vocational training and supportive services for meeting the identified needs of people and state manpower requirements. The system is dedicated to helping all individuals to realize their vocational objectives and to achieve an optimum level of personal competency consistent with their interests, aptitudes, desires, and abilities.

The mission of agencies in South Carolina which provide vocational training is to use all available resources in South Carolina so that people of all ages in all communities of the state will have ready access to vocational training or retraining which is of high quality, which is realistic in the light of actual or anticipated opportunities for gainful employment, and which is suited to their needs, interests, and ability to benefit from such training.

The formal educational experiences of citizens in South Carolina are governed by three separate governing boards. The Commission on Higher Education has responsibility for the strengthening of all the state's institutions of higher learning to the end that quality education and training beyond high school may be available to every citizen who desires it and can be expected to profit from it. The Commission on Higher Education is a coordinating body which must rely primarily on logical persuasion to gain cooperation and support. A major function of coordination is that of planning. The 18-member Commission on Higher Education, in its planning capacity, serves as the South Carolina Commission on Postsecondary Education Planning.

The State Board for Technical and Comprehensive Education has within its jurisdiction all state-supported technical institutions and their programs. The board has approval and authority over all postsecondary technical programs financed in whole or part by state funds. The board has the authority to establish statewide policies and procedures necessary to ensure educational and financial accountability for operation of technical education institutions and their programs. The board may contract with other agencies or institutions and make such rules and regulations, including policies and guidelines, as deemed necessary to carry out its legal mandate.

At the state level, public education in South Carolina is governed and regulated by the State Board of Education and is administered by the State Superintendent and his staff, the State Department of Education. The Board, the Superintendent, and the Department work together to see that state-level plans for public education are implemented. The State Board has the responsibility for secondary educational programs and adult vocational programs. The State Board of Education serves as the State Board of Vocational Education.

In addition to these agencies, the Office of the Governor, Manpower Division, as prime sponsor, has responsibility for the administration of programs under the Comprehensive Employment and Training Act (CETA) of 1973. The role of the prime sponsor is to develop a comprehensive manpower program designed to meet the needs of disadvantaged, unemployed, and underemployed individuals. This role includes responsibilities in both planning and implementation.

ORGANIZATION AND GOVERNANCE OF PUBLIC EDUCATION

STATE BOARD OF EDUCATION

The State Board of Education is an eighteen-member board composed of one member appointed by the Governor and one member from each of the sixteen judicial circuits. Each member representing a judicial circuit is elected for a four-year term by the legislative delegates of the several counties within the circuit.

The South Carolina State Board of Education, as in most other states, is the state's educational policy-making body. To that end, the legislature has enjoined the State Board by statute to carry out certain responsibilities and to be responsible for specific duties in the state's program for public education (Act 309, 1963). The State Board of Education has the power to:

1. Adopt policies, rules and regulations not inconsistent with the laws of the State for its own government and for the government of the free public schools.

2. Annually approve budget requests for the institutions, agencies, and services under the control of the Board as prepared by the State Superintendent of Education prior to being submitted to the Budget and Control Board and to the General Assembly.

3. Adopt minimum standards for any phase of education as are considered necessary to aid in providing adequate educational opportunities and facilities.

4. Prescribe and enforce rules for the examination and certification of teachers.

5. Grant state teacher's certificates and revoke them for immoral or unprofessional conduct, or evident unfitness for teaching.

6. Prescribe and enforce courses of study for the free public schools.

7. Prescribe and enforce the use of textbooks and other instructional materials for the various subjects taught in conjunction with the free public schools of the State, both high schools and elementary schools, in accordance with the courses of study as prepared and promulgated by the Board.

8. Appoint such committees and such members of committees as may be required or as may be desirable to carry out the orderly functions of the Board.

9. Cooperate fully with the State Superintendent at all times to the end that the State system of public education may constantly be improved.

10. Assume such other responsibilities and exercise such other powers and perform such other duties as may be assigned to it by law or as it may find necessary to aid in carrying out the purposes and objectives of the Constitution of the State (S.C. Code of Laws 1962 as amended, Section 21–45).

The State Board for Vocational Education, which is the South Carolina State Board of Education, is the sole agency responsible for the administration, or for the supervision of the administration, of vocational programs consistent with state law and in accordance with Public Law 94-482, dated October 12, 1976. The Board has all necessary power to cooperate with the U.S. Office of Education in the administration of the State Plan for Vocational Education.

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The responsibilities for vocational education of the State Board include the following:

1. The coordination of the development of policy with respect to vocational programs in accordance with Public Law 94-482.

2. The coordination of the development and the submission to the Commissioner, of the Five Year State Plan and of the Annual Program Plan and Accountability Report as required by Public Law 94-482.

3. The consultation with the State Advisory Council on Vocational and Technical Education and other appropriate state agencies, councils, and individuals involved in planning and reporting as required by Public Law 94-482.

4. The submission to the Administrator of the National Center for Educational Statistics of the information required for the national vocational education reporting and accounting system pursuant to Section 161(a) of Public Law 94-482.

STATE SUPERINTENDENT OF EDUCATION

The State Superintendent of Education is a constitutional officer (Article 11, Section 2, S. C. Constitution) elected in the general election by the people of South Carolina. The State Superintendent of Education has certain general statutory duties. The statute states that the State Superintendent of Education shall:

1. Serve as secretary and administrative officer to the State Board of Education.

2. Have general supervision over and management of all public school funds provided by the state and federal governments.

3. Organize, staff and administer a State Department of Education which shall include such divisions and departments as are necessary to render the maximum service to public education in the state.

4. Keep the public informed as to the problems and needs of the public schools by constant contact with all school administrators and teachers, by his personal appearances at public gatherings, and by information furnished to the various news media of the state.

5. Have printed and distributed such bulletins, manuals, and circulars as he may deem necessary for the professional improvement of teachers and for the cultivation of public sentiment for public education, and have printed all forms necessary and proper for the administration of the State Department of Education.

6. Administer, through the State Department of Education, all policies and procedures adopted by the State Board of Education.

7. Assume such other responsibilities and perform such other duties as may be prescribed by law or as may be assigned by the State Board of Education. (S.C. Code of Laws 1962 as amended, Section 21–23).

STATE DEPARTMENT OF EDUCATION

As noted above, the State Superintendent of Education is empowered to organize and staff a State Department of Education which serves primarily as the administrative agency to assist the State Superintendent of Education in the performance of three general functions--regulatory, finance, and leadership.

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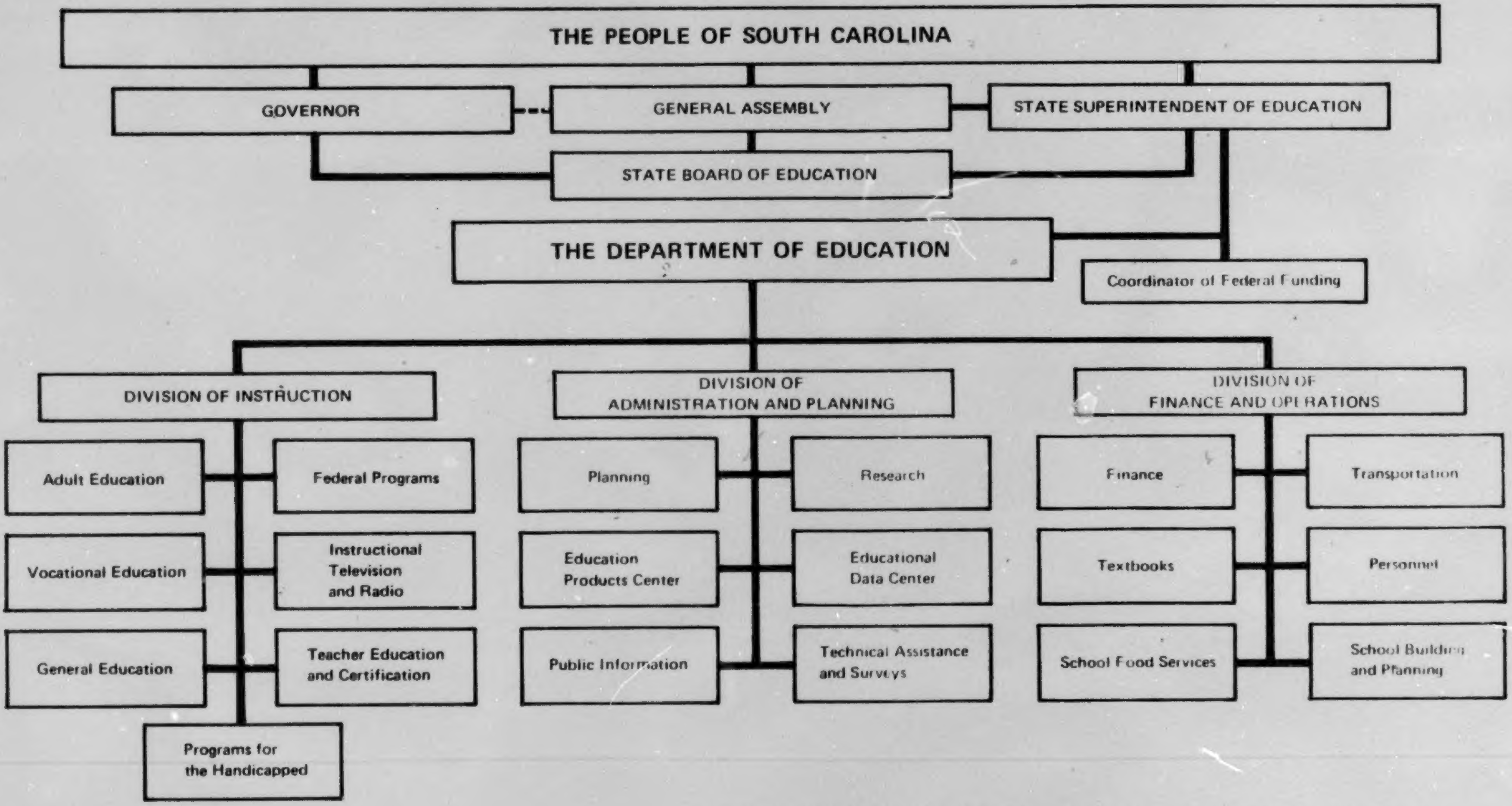
The Department consists of three divisions (see Chart 1 for Department of Education organization): Administration and Planning, Finance and Operations, and Instruction. Each division is headed by a Deputy State Superintendent of Education. Functioning within each Division are assigned offices. The Division of Administration and Planning consists of the Offices of Planning, Public Information, Research, and Technical Assistance and Surveys, the Educational Data Center, and the Education Products Center. Within the Division of Finance and Operations are the Offices of Finance, Personnel, School Planning and Building, Textbooks, School Food Services, and Transportation. The Division of Instruction comprises the Offices of Adult Education, Vocational Education, Instructional Television, Federal Programs, Teacher Education and Certification, General Education, and Programs for the Handicapped.

CHART 1


THE PEOPLE OF SOUTH CAROLINA
GOVERNOR
GENERAL ASSEMBLY
STATE SUPERINTENDENT OF EDUCATION
STATE BOARD OF EDUCATION
THE DEPARTMENT OF EDUCATION
Coordinator of Federal Funding
DIVISION OF INSTRUCTION
Adult Education
Federal Programs
Vocational Education
Instructional Television and Radio
General Education
Teacher Education and Certification
Programs for the Handicapped
DIVISION OF ADMINISTRATION AND PLANNING
Planning
Research
Education Products Center
Educational Data Center
Public Information
Technical Assistance and Surveys
DIVISION OF FINANCE AND OPERATIONS
Finance
Transportation
Textbooks
Personnel
School Food Services
School Building and Planning

SOUTH CAROLINA PUBLIC EDUCATION K-12
STATE ADMINISTRATION
OCTOBER 1, 1976

The following listing shows the general responsibilities of each office within the three divisions of the Department of Education.

Division of Administration and Planning

Office of Public Information	Uses various communications media and techniques to aid the State Superintendent in discharging his legislative mandate to inform the people of the state concerning the progress, problems, and needs of public education.
Office of Technical Assistance and Surveys	Provides assistance to local systems in solving problems related to civil rights compliance,; coordinates school surveys.
Office of Research	Conducts educational research and evaluations of educational programs; maintains statistical information.
Educational Data Center	Manages and operates an information processing center to provide the Department, school districts and other government agencies information vital to the management of the educational system.
Office of Planning	Coordinates the Department's planning efforts; conducts training programs in planning for local school districts; provides legal and policy information.
Education Products Center	Provides technical assistance in production of print media; coordinates the retrieval, packaging, production, and dissemination of educational data resources.

Division of Finance and Operations

Office of Finance	Manages the internal finance of the Department including budgeting, purchasing, accounting, printing, mail and delivery services; manages the School Attendance Program; receives state, federal, and other funds, and disburses them to the public schools; provides fiscal information.
Office of Transportation	Administers the school bus transportation program, including purchasing, assignment, and routing; operates regional maintenance shops for servicing and repairing school buses; trains school bus drivers.
Office of Personnel	Recruits, selects, classifies, and orients new employees; administers employee benefits, including sick leave, annual leave, insurance and retirement; operates a Department telephone information service; administers the payroll for the Department.
Office of School Food Services	Administers the school lunch and commodity distribution programs; provides training and assistance to local school systems in the area of food service.
Office of School Planning and Building	Regulates and approves educational facilities, equipment and sites; assists school districts in planning educational facilities; conducts school maintenance surveys and evaluations.

Division of Instruction

Office of Adult Education	Administers and supervises the state's Adult Basic Educational Program, Adult High School Completion Program, and Adult Civil Defense Education Program; regulates and approves educational programs for veterans.
Office of Federal Programs	Administers the Compensatory Education Program Provided under Title I, the Library Materials Section provided under Title II, and the Model Programs Section provided under Title III.
Office of Vocational Education	Administers the state's program of vocational education in the public secondary schools.
Office of Instructional Television	Has the responsibility for the development and utilization of instructional television for in-school youth and inservice teacher education.
Office of General Education	Provides for school district accreditation, administrative leadership and planning, curriculum development and review, inservice education for teachers and administrators, and leadership and services for early childhood education, individually guided education, library, media, and guidance services.
Office of Teacher Education and Certification	Regulates and approves college programs of teacher education and administers the state's program of teacher certification.
Office of Programs for the Handicapped	Administers the state's program for educating and training physically, mentally, and emotionally handicapped children.

OFFICE OF VOCATIONAL EDUCATION

The Office of Vocational Education is the agency primarily responsible for the administration of vocational programs funded through PL 94-482. The Office is under the direction of the State Director of Vocational Education and is divided into three sections: Project Processing and Review, Ancillary Services, and Program Planning and Development. (See Charts 2 and 3 for the organization of the Office of Vocational Education and the Vocational Education Media Center, respectively.)

The State Director is responsible to the State Board, through the State Superintendent and Deputy Superintendent for Instruction, for the planning, administration, coordination, supervision, and promotion of all phases of the program of vocational education in the state, and is the official representative of the State Superintendent in all matters pertaining to vocational education.

The State Director is responsible:

1. For general promotional programs for all phases of vocational education in the state.

2. For the general administration of the vocational program and the supervision of personnel in the various vocational services.

3. For submitting to the State Board the annual budget for expenditure of state and federal funds for vocational education.

4. For providing a uniform system of records for the operation of the vocational program, in cooperation with the Finance Division.

5. For the preparation of the State Plan and for obtaining its approval by the State Board.

6. For submitting to the Finance Officer of the State Department of Education records and reports for disbursement of all state and federal vocational funds.

7. For making recommendations to the State Superintendent for personnel to be employed in vocational education on state, district, or local levels.

8. For other duties assigned by the State Board, the State Superintendent, and the Deputy Superintendent for Instruction.

The supervisors of the three sections have the responsibility of coordinating the various functions of the Office of Vocational Education, including the supervision of the activities of office personnel. Major functions of the Chief Supervisor of Program Planning and Development include developing annual and projected program activities in various service areas of vocational education. Major functions of the Chief Supervisor of Ancillary Services include developing the supporting services needed to accelerate the development of efficient and effective vocational education programs. Major functions of the Project Processing and Review State Supervisor include developing and implementing procedures whereby local applications for vocational education funds may be efficiently processed, and supervising the accounting procedures for state and federal vocational education funds.

The Office of Vocational Education operates district offices in Anderson, Florence, Walterboro, and Winnsboro to provide technical assistance to local school districts in developing and operating vocational education programs. Each office is responsible for providing assistance to local school districts in designated counties.

The district offices are located in four different areas of the state to make them easily accessible to administrators in the local school districts. This saves both time and money in travel for both local administrators and Office of Vocational Education personnel.

The district offices have consultants in each service area available to local school districts who provide technical assistance in the following areas:

1. Development of local plans for vocational education programs.

2. Development of plans for special programs in vocational education.

3. Operation of vocational programs.

4. Operation of special programs in vocational education.

5. Evaluation of programs.

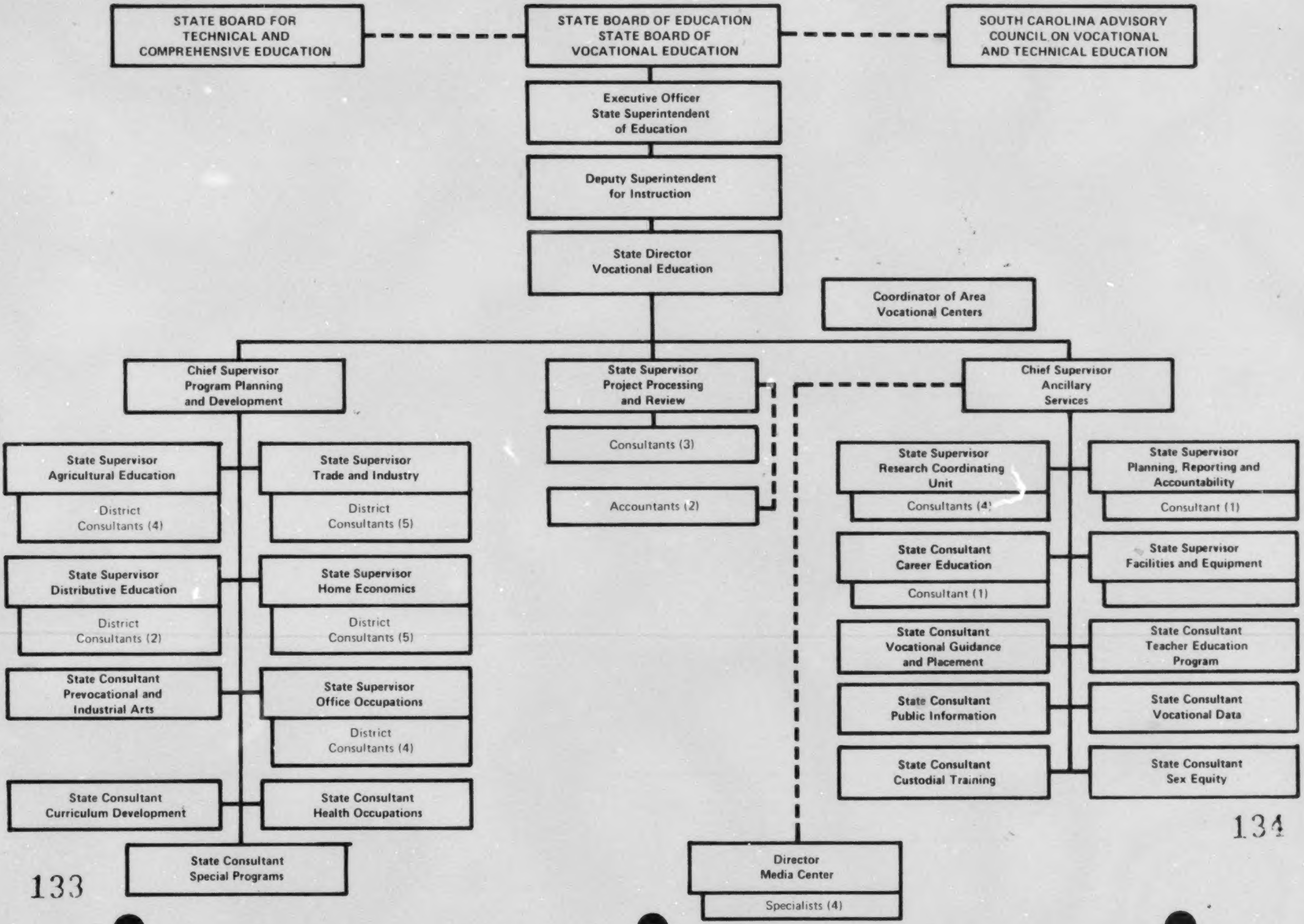
6. Program assistance in each service area.

Other areas of responsibility include informing school administrators of the policies governing vocational education programs and conducting inservice training to improve vocational education programs at the local level.

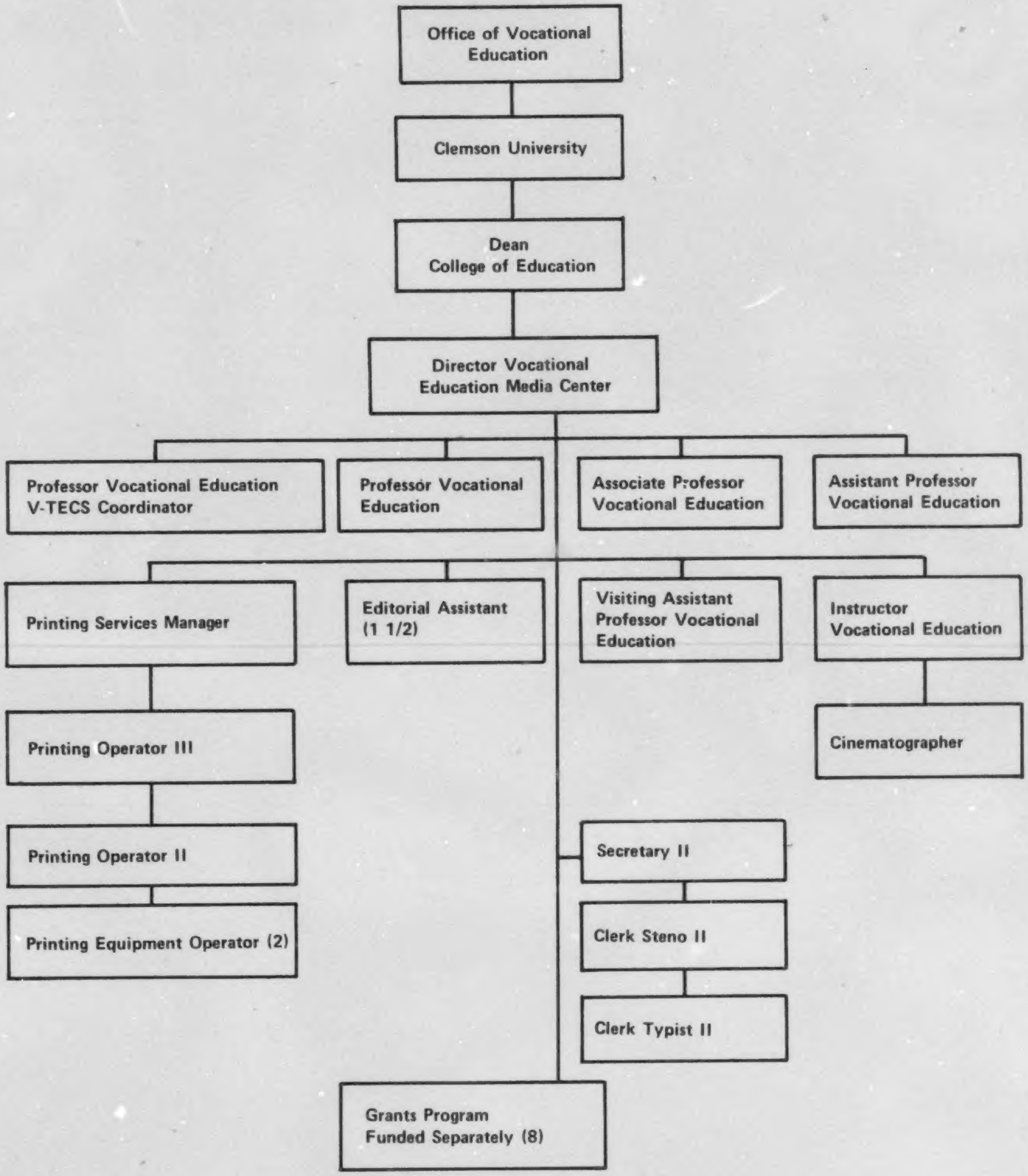
The locations of the four district offices and the service areas represented by each are shown on Map 1.

CHART 2

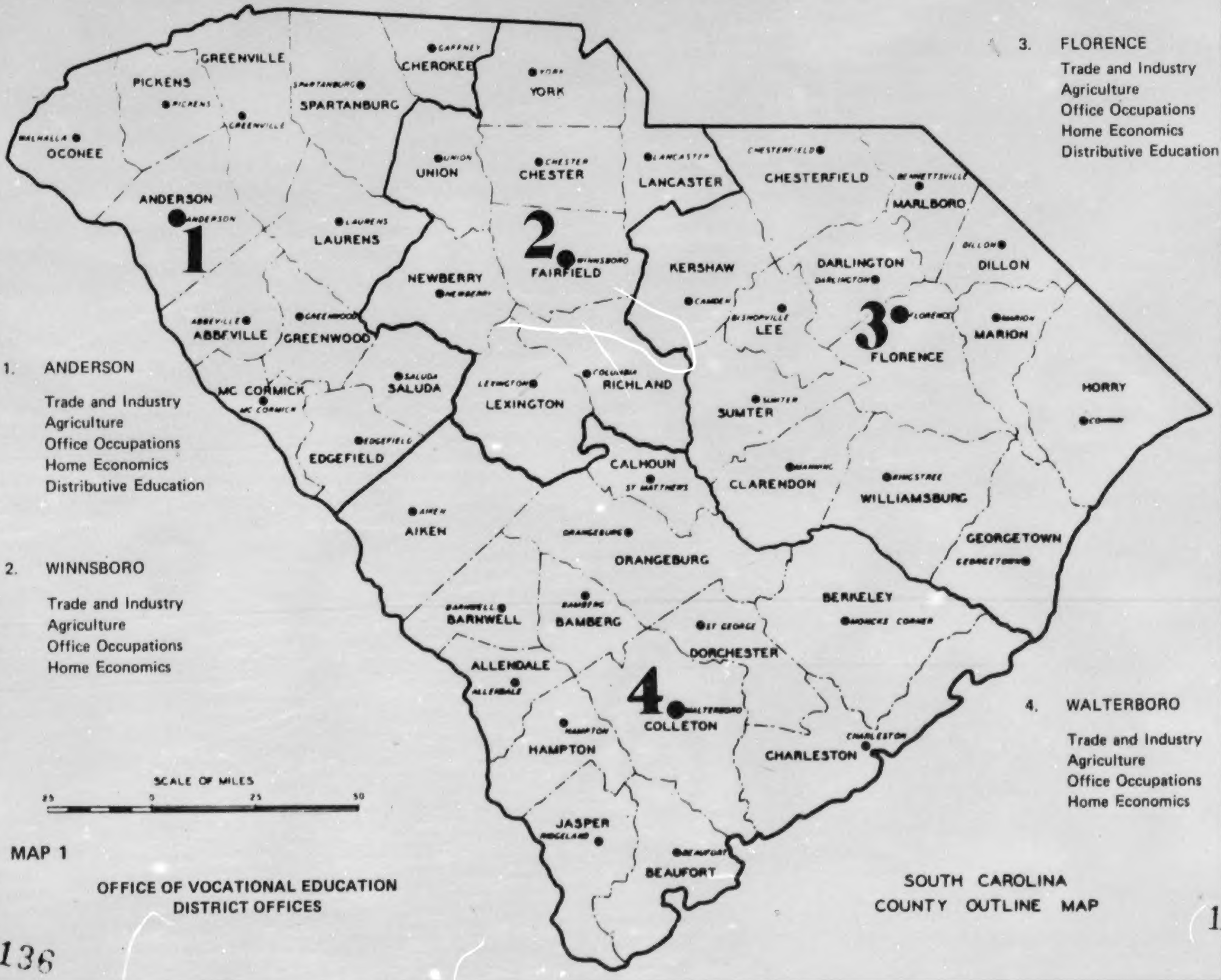
OFFICE OF VOCATIONAL EDUCATION


STATE BOARD FOR TECHNICAL AND COMPREHENSIVE EDUCATION
STATE BOARD OF EDUCATION STATE BOARD OF VOCATIONAL EDUCATION
SOUTH CAROLINA ADVISORY COUNCIL ON VOCATIONAL AND TECHNICAL EDUCATION
Executive Officer State Superintendent of Education
Deputy Superintendent for Instruction
State Director Vocational Education
Coordinator of Area Vocational Centers
Chief Supervisor Program Planning and Development
State Supervisor Project Processing and Review
Chief Supervisor Ancillary Services
State Supervisor Agricultural Education
District Consultants (4)
State Supervisor Trade and Industry
District Consultants (5)
State Supervisor Distributive Education
District Consultants (2)
State Supervisor Home Economics
District Consultants (5)
State Consultant Prevocational and Industrial Arts
State Supervisor Office Occupations
District Consultants (4)
State Consultant Curriculum Development
State Consultant Health Occupations
State Consultant Special Programs
Consultants (3)
Accountants (2)
Director Media Center
Specialists (4)
State Supervisor Research Coordinating Unit
Consultants (4)
State Supervisor Planning, Reporting and Accountability
Consultant (1)
State Consultant Career Education
Consultant (1)
State Supervisor Facilities and Equipment
State Consultant Vocational Guidance and Placement
State Consultant Teacher Education Program
State Consultant Public Information
State Consultant Vocational Data
State Consultant Custodial Training
State Consultant Sex Equity

Vocational Education Media Center


Office of Vocational Education
Clemson University
Dean College of Education
Director Vocational Education Media Center
Professor Vocational Education V-TECS Coordinator
Professor Vocational Education
Associate Professor Vocational Education
Assistant Professor Vocational Education
Printing Services Manager
Editorial Assistant (1 1/2)
Visiting Assistant Professor Vocational Education
Instructor Vocational Education
Printing Operator III
Cinematographer
Printing Operator II
Printing Equipment Operator (2)
Secretary II
Clerk Steno II
Clerk Typist II
Grants Program Funded Separately (8)

C-30


GREENVILLE
PICKENS
OCONEE
WALHALLA
ANDERSON
CHEROKEE
GAFFNEY
SPARTANBURG
YORK
UNION
CHESTER
LANCASTER
CHESTERFIELD
MARLBORO
BENNETTSVILLE
LAURENS
NEWBERRY
FAIRFIELD
WINNSBORO
KERSHAW
CAMDEN
DARLINGTON
DILLON
ABBEVILLE
GREENWOOD
LEE
BISHOPVILLE
FLORENCE
MARION
MC CORMICK
SALUDA
LEXINGTON
RICHLAND
COLUMBIA
SUMTER
HORRY
CONWAY
EDGEFIELD
CALHOUN
ST MATTHEWS
CLARENDON
MANNING
WILLIAMSBURG
KINGSTREE
AIKEN
ORANGEBURG
GEORGETOWN
BERKELEY
MONCKS CORNER
BARNWELL
BAMBERG
ST GEORGE
DORCHESTER
ALLENDALE
COLLETON
WALTERBORO
HAMPTON
CHARLESTON
JASPER
RIDGELAND
BEAUFORT
1
2
3
4
SCALE OF MILES
25
0
25
50
S C STATE HIGHWAY DEPT - 1952

1. ANDERSON

Trade and Industry
Agriculture
Office Occupations
Home Economics
Distributive Education

2. WINNSBORO

Trade and Industry
Agriculture
Office Occupations
Home Economics

3. FLORENCE

Trade and Industry
Agriculture
Office Occupations
Home Economics
Distributive Education

4. WALTERBORO

Trade and Industry
Agriculture
Office Occupations
Home Economics

MAP 1

OFFICE OF VOCATIONAL EDUCATION
DISTRICT OFFICES

SOUTH CAROLINA
COUNTY OUTLINE MAP

LOCAL EDUCATION AGENCY

Each school district is under the management and control of the board of trustees as provided for by state statute and generally is subject to the supervision and order of the county board of education (S.C. Code of Laws 1962, Section 21-221). This structure, however, is not common to all school districts, for local legislation in some cases has abolished the county board of education and devolved its powers and duties on the local board of trustees or county council. There are ninety-two school districts divided geographically and politically among the forty-six counties of the state. All of these districts derive their power of governance from the people as indicated by the State Constitution, which states that:

> All political power is vested in and derived from the people only, therefore, they have the right at all times to modify their form of government (Article 1, Section 1, S.C. Constitution).

Pursuant to this Article, the people have mandated through Article XI, Section 3, that:

> The General Assembly shall provide for the maintenance and support of a system of free public schools open to all children in the State and shall establish, organize and support such other public institutions of learning as may be desirable.

Consequently, educating the children of South Carolina may be said to be a state responsibility being duly delegated to the local school districts by state statute.

Of the forty-six counties in South Carolina, twenty-nine are single school district counties and seventeen are multi-school district counties.

TYPE	NAME	NUMBER OF COUNTIES
Eight-district	Orangeburg	1
Seven-district	Spartanburg	1
Five-district	Anderson	3
	Florence	
	Lexington	
Four-district	Marion	2
	York	
Three-district	Barnwell	5
	Clarendon	
	Dillon	
	Dorchester	
	Greenwood	
Two-district	Bamberg	5
	Hampton	
	Laurens	
	Richland	
	Sumter	
One-district	All other counties	29
TOTAL		46

Six of the ninety-two districts cut across existing county lines into adjoining counties:

1. Greenville County School District crosses into Laurens, Spartanburg, and Anderson Counties.
2. Greenwood District 51 crosses into Abbeville and Laurens Counties.
3. Aiken County School District crosses into Saluda County.
4. Lexington District 5 crosses into Richland County.
5. Lexington District 3 crosses into Saluda County.
6. Sumter District 2 crosses into Clarendon County.

LOCAL BOARD/ADMINISTRATOR

Each local school district is under the management and control of the district board of trustees or its equivalent, subject to the supervision and orders of the county board of education or its equivalent (S.C. Code of Laws, 1962, Section 21-221). These district boards operate in legislative, judicial, and executive capacities. In exercising its executive function, the board controls the local educational interests of the district and sees to it that school laws and regulations are enforced.

Functioning in its legislative capacity, the district board of trustees is empowered to make general rules and regulations that affect the district's school operations and to make the rules governing student conduct and scholastic achievement (S.C. Code of Laws, 1962, Section 21-230 [2], [3]). The board of trustees may also, at its discretion, designate one or more of its members to conduct any hearing in connection with any responsibility of the board and to make a report on such a hearing to the board for its final action (S.C. Code of Laws, 1962, Section 21-230.2). In such instances the board functions in a judicial capacity. The district board of trustees is given many express statutory duties and responsibilities in South Carolina. The following chart lists many of these statutory duties according to the classification of these duties as they relate to the legislative, judicial, or executive governmental functions. The notations in parentheses indicate the section in which the duties are referenced in the S.C. Code of Laws, 1962, as amended.

LEGISLATIVE

(1) Make rules and regulations generally (21-230.2).
(2) Make rules and regulations prescribing standards of conduct and scholastic achievement (21-230 [3]).

JUDICIAL

(1) . Conduct hearings or delegate power to one or more members, who report to board (21-230.2).

EXECUTIVE

(1) Manage and control district (21-221).
(2) Control the educational interests of district, including the right to operate or not operate any school or schools (21-230 [7]).
(3) Suspend and dismiss pupils (21-230 [3]), provided report of suspension is made to juvenile domestic relations court, if one is established in county (15-1204).
(4) Transfer and assign pupils (21-230 [9]).
(5) Prescribe conditions of attendance for children not meeting eligibility requirements (21-230 [10]).
(6) Waive age restrictions on attendance (21-752 [3]).
(7) Report nonattendance and institute proceedings under the Compulsory Attendance Law (21-757.4).
(8) Control school property (21-230 [5]).
(9) Acquire land (21-232), even by condemnation (21-233).
(10) Provide schoolhouses (21-230 [1]).
(11) Sell or lease school property with report to county board (21-238).
(12) Hold in trust gifts made to district on giving approved bond (21-231).
(13) Insure motor vehicles (21-238).
(14) Convey abandoned school property (21-331).
(15) Maintain schools and property in accordance with sanitation requirements established by State Board of Health *(Rules and Regulations of State Board of Health, Sanitation Requirements for School, Section 4)*.
(16) Employ and discharge teachers (210230 [2]).
(17) Require teaching of certain enumerated subjects (21-411).
(18) Direct and control schools for eleemosynary institutions (21-611 and 21-612).

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(19) Approve claims against school funds (21-951).
(20) Charge matriculation and incidental fees (21-951).
(21) Petition for reduction of school tax levies (21-927).
(22) Make annual reports to State Superintendent (21-243).
(23) Visit schools (21-230 [6]).
(24) Call meetings of electors for consultation (21-230 [4]).
(25) Make or cause to be made an annual school census of school-age children not enrolled in public schools (21-764).
(26) Provide protective eye devices to persons in certain classrooms and labs (32-697).
(27) Employ only professional and nonprofessional personnel with annual health certificate (32-692 and *Rules and Regulations of State Board of Education).*
(28) Accept and hold school property (21-231.1).
(29) Acquire supplies and equipment (21-230.4).
(30) Make regulations to govern the use of school buildings and equipment for other than normal school activity (21-230.5) — Keep equipment in good repair (21-230.6).
(31) Admit only vaccinated students (32-692).
(32) Report nonattendance to juvenile court (21-247.4).

In terms of selection of district boards, the State of South Carolina has a diversified system. Of the ninety-two districts, fifty-one are elected; seven boards are appointed by the Governor on recommendation of the County Legislative Delegation; thirty-two boards are appointed by the County Board of Education; and two boards, Colleton and Lancaster, are partially appointed and elected.

In past years the majority of the controlling local boards were appointed by the Governor on the recommendation of the County Legislative Delegation. However, that practice is changing and the current trend is toward vesting the board selection process in the people through the electoral process.

In eighty-three districts, the local chief administrator is appointed. Jasper, a single-district county, has two administrators (one elected, one appointed) with the county board delineating duties in case of conflict. The intermediate chief administrator for Hampton County serves as local administrator for Hampton 2 as well. The local chief administrator is elected for a four-year term in the remaining seven districts: Berkeley, Colleton, Darlington, Georgetown, Lancaster, Oconee, and Williamsburg.

Table 6 shows the diversified selection procedure for local boards of education.

TABLE 6

METHODS OF SELECTION OF LOCAL BOARDS

ELECTED	APPOINTED		
	BY GOVERNOR ON RECOMMENDATION OF COUNTY LEGISLATIVE DELEGATION	BY COUNTY BOARD OF EDUCATION	OTHER METHODS
(51 boards)	(7 boards)	(32 boards)	(2 boards)
Abbeville; Aiken; Anderson 1–5; Barnwell 19, 29, 45; Beaufort; Calhoun; Charleston; Cherokee; Chester; Chesterfield; Clarendon 3; Edgefield; Florence 1–5; Georgetown; Greenville; Greenwood 50,51,52; Horry; Jasper; Kershaw; Laurens 55,56; Lexington 1–5; Newberry; Oconee; Pickens; Richland 1,2; Saluda; Sumter 2,17; Union; York 1–4	Allendale, Berkeley Fairfield, Lee, McCormick, Marlboro, Williamsburg	Bamberg 1, 2; Clarendon 1, 2; Darlington; Dillon 1–3; Dorchester 1–3; Hampton 1, 2; Marion 1–4; Orangeburg 1–8 (unless excess of candidates); Spartanburg 1–7 (unless voters petition)	Colleton–partially appointed by Governor on recommendation of County Legislative Delegation and partially elected; Lancaster–elected by Area Board of Trustees who are elected by the electorate of their area according to statute

DELIVERY SYSTEM

VOCATIONAL CENTERS

The governance of the vocational education centers at the local level falls into one of two categories, those governed by a single local district and those governed by two or more local districts. Generally the vocational education centers are governed by the local districts which they serve. The exception to this is that some local districts pay tuition for a small number of students to attend vocational centers not in these districts. Of the 56 vocational education centers in South Carolina, 44 are governed by a single district and 12 are governed by two or more districts. Those governed by two or more districts are:

1. Anderson County Districts I and II Vocational Center
2. R.D. Anderson Area Vocational Center
3. Barnwell County Area Vocational Center
4. Beaufort-Jasper Career Education Center
5. Clarendon County Area Vocational Center
6. Daniel Morgan Vocational Center
7. Dillon County Area Vocational Center
8. Dorchester County Vocational Center
9. Greenwood County Vocational Facilities
10. Marion-Mullins Vocational Center
11. Sumter County Career Center
12. H.B. Swofford Area Vocational Center

VOCATIONAL WINGS

Twenty-one high schools have vocational programs housed in vocational buildings adjacent to them. Generally the wings serve only students at the high school where they are located, and students are not bused from other high schools to participate in the program.

HIGH SCHOOL

Two hundred and sixteen of the state's high schools offer vocational programs. Generally these programs are limited to home economics, agriculture, distributive education, industrial arts, or prevocational education.

OTHER STATE AGENCIES

In addition to the ninety-two school districts, the Office of Vocational Education funds vocational programs for disadvantaged and handicapped students at institutions administered through six other state agencies. These are:

1. Department of Corrections
2. Department of Mental Health
3. Department of Mental Retardation
4. Division of Youth Services
5. Opportunity School
6. School for the Deaf and Blind

The locations of the vocational education centers and the vocational wings are shown on Map 2.

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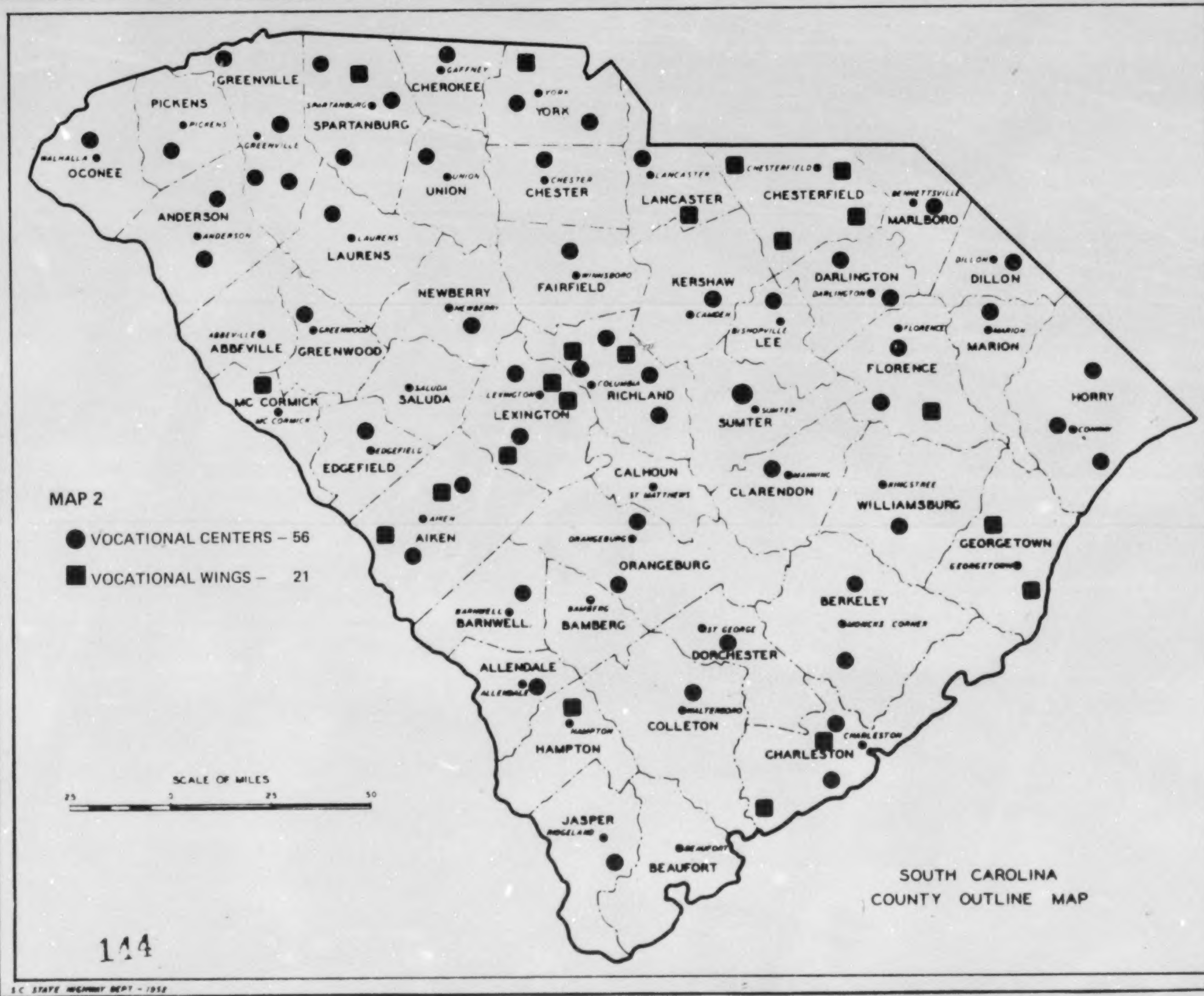

OCONEE
WALHALLA
PICKENS
PICKENS
GREENVILLE
GREENVILLE
SPARTANBURG
SPARTANBURG
CHEROKEE
GAFFNEY
YORK
YORK
ANDERSON
ANDERSON
LAURENS
LAURENS
UNION
UNION
CHESTER
CHESTER
LANCASTER
LANCASTER
CHESTERFIELD
CHESTERFIELD
MARLBORO
BENNETTSVILLE
DILLON
DILLON
DARLINGTON
DARLINGTON
FAIRFIELD
WINNSBORO
KERSHAW
CAMDEN
LEE
BISHOPVILLE
NEWBERRY
NEWBERRY
ABBEVILLE
ABBEVILLE
GREENWOOD
GREENWOOD
MC CORMICK
MC CORMICK
SALUDA
SALUDA
LEXINGTON
LEXINGTON
RICHLAND
COLUMBIA
SUMTER
SUMTER
FLORENCE
FLORENCE
MARION
MARION
HORRY
CONWAY
EDGEFIELD
EDGEFIELD
AIKEN
AIKEN
CALHOUN
ST MATTHEWS
CLARENDON
MANNING
WILLIAMSBURG
KINGSTREE
GEORGETOWN
GEORGETOWN
ORANGEBURG
ORANGEBURG
BERKELEY
MONCKS CORNER
BARNWELL
BARNWELL
BAMBERG
BAMBERG
DORCHESTER
ST GEORGE
ALLENDALE
ALLENDALE
HAMPTON
HAMPTON
COLLETON
WALTERBORO
CHARLESTON
CHARLESTON
JASPER
RIDGELAND
BEAUFORT
BEAUFORT
SCALE OF MILES
25
0
25
50
S C STATE HIGHWAY DEPT - 1952

MAP 2

● VOCATIONAL CENTERS – 56

■ VOCATIONAL WINGS – 21

SOUTH CAROLINA
COUNTY OUTLINE MAP

RELATIONSHIP OF THE STATE BOARD OF EDUCATION TO THE STATE BOARD FOR TECHNICAL AND COMPREHENSIVE EDUCATION

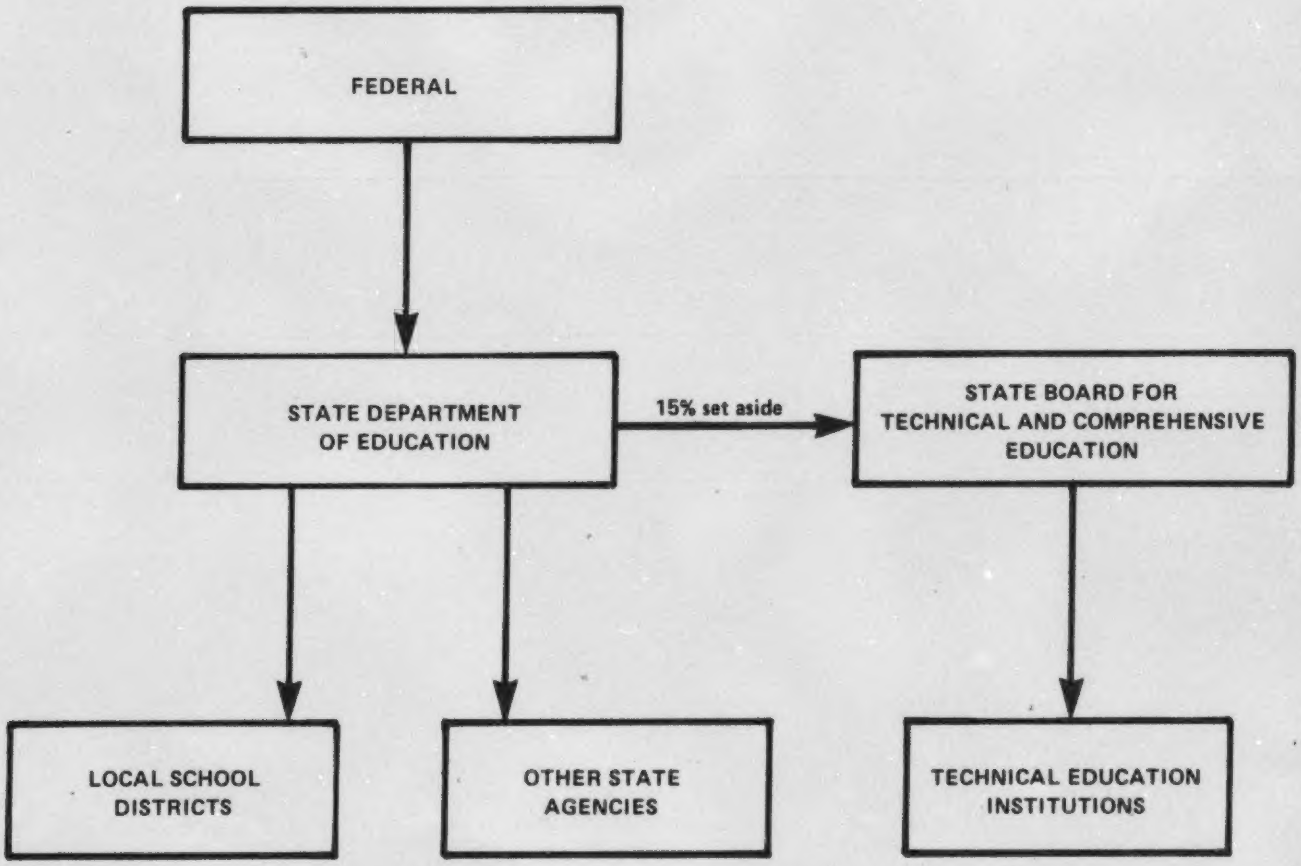
The State Board of Education annually makes a grant to the State Board for Technical and Comprehensive Education to conduct postsecondary and adult vocational programs. This grant is used to support educational programs in accordance with an application submitted by The State Board for Technical and Comprehensive Education, as approved by the Office of Vocational Education. The State Board for Technical and Comprehensive Education participates in the development of the annual and five-year State Plan for Vocational-Technical Education. The State Board of Education delegates full authority and responsibility to the State Board for Technical and Comprehensive Education for the supervision, evaluation, and reporting of all training conducted through its grant to the TEC Board, in accordance with the annual and five-year State Plan for Vocational-Technical Education and the requirements of Public Law 94-482.

At the local level, individual TEC institutions and secondary vocational education centers may develop program articulation agreements. There are no statewide program articulation agreements.

Chart 4 illustrates the flow of federal funds through the State Department of Education to the local school districts, to other state agencies, and, though the State Board for Technical and Comprehensive Education, to the technical education institutions.

CHART 4

FLOW OF FEDERAL VOCATIONAL FUNDS TO LOCAL EDUCATION AGENCIES AND TEC'S


FEDERAL
STATE DEPARTMENT OF EDUCATION
15% set aside
STATE BOARD FOR TECHNICAL AND COMPREHENSIVE EDUCATION
LOCAL SCHOOL DISTRICTS
OTHER STATE AGENCIES
TECHNICAL EDUCATION INSTITUTIONS

All federal money is matched as required by Public Law 94-482 with state and local monies.

ORGANIZATION AND GOVERNANCE OF TECHNICAL EDUCATION

STATE BOARD FOR TECHNICAL AND COMPREHENSIVE EDUCATION

The South Carolina system of technical and comprehensive education, known as "TEC," began in 1961 when the State Advisory Committee for Technical Training was appointed. Subsequently, a statewide network of public two-year technical education centers was established under the supervision of local area commissions and coordinated by the State Advisory Committee. At the same time, special schools (industrial service) programs began training work forces for new and expanding industries. These programs stimulated dramatic economic growth in South Carolina by attracting new investment capital and related job opportunities to the state. Thereafter, technology and craft programs were expanded to meet the comprehensive educational needs of local communities. Demands from employers and students led to the development of business and commerce, engineering, industrial, allied health, agriculture, and public service curricula.

TEC became a mature statewide system in 1972 when the South Carolina General Assembly passed Act 1268. The Act created the State Board for Technical and Comprehensive Education to replace the State Advisory Committee for Technical Training and gave the State Board for TEC jurisdiction over all two-year state-supported postsecondary institutions and programs, except for the University of South Carolina and Clemson Branches and Centers then in operation. Although authority was granted to add college transfer programs to TEC's increasingly comprehensive educational programs, the Act charged the State Board for TEC to continue its emphasis upon programs designed to promote economic development by serving new and expanding industry. The Act also continued a policy for local area commission and advisory committee participation and affirmed the requirement for local provision of capital facilities all subject to State TEC Board and budgetary control. TEC has thus become a fully comprehensive statewide educational system, vital sector of higher education open to all citizens, and existing to meet the needs of South Carolina and its people.

The state TEC system is dedicated to a philosophy of helping individuals to realize their worth and potential. Because people represent the greatest single resource of South Carolina, TEC is committed to providing a high quality and economically feasible educational system that minimizes geographic, economic, academic, and other barriers to postsecondary education. TEC recognizes that by subscribing to an "open door" admissions policy it has an obligation to respond to the needs of each student at his or her level of ability and development.

Inherent in the philosophy of TEC is recognition of the TEC system as a unique part of higher education. TEC accepts responsibility to cooperate with other postsecondary educational institutions as well as the secondary vocational education system to minimize undesirable duplication and to maximize resource utilization and articulation procedures.

The State Board for Technical and Comprehensive Education is organized as shown by Chart 5. The makeup of South Carolina's system of postsecondary education is reflected by Chart 6.

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CHART 5

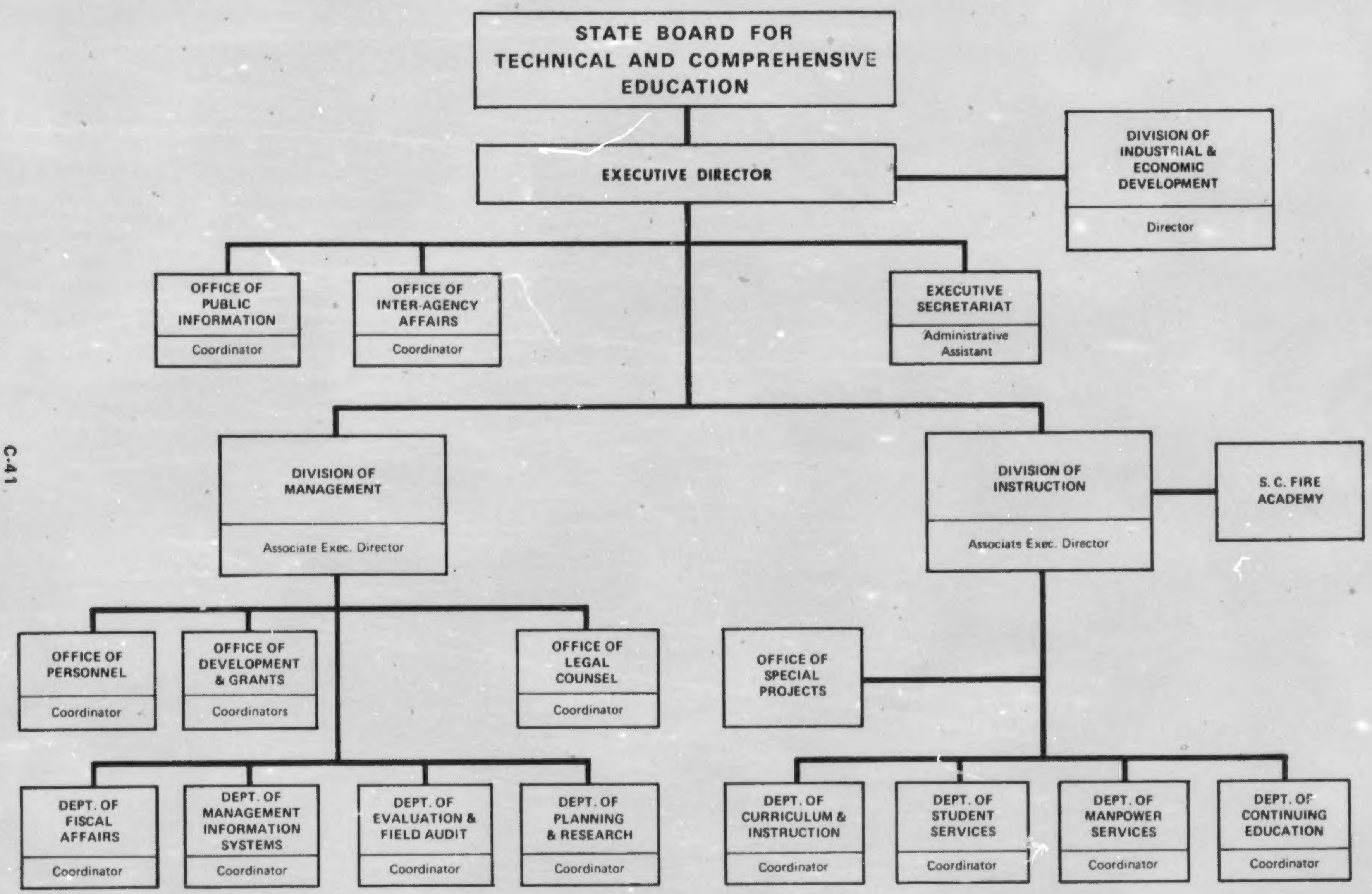
STATE BOARD FOR TECHNICAL AND COMPREHENSIVE EDUCATION
EXECUTIVE DIRECTOR
DIVISION OF INDUSTRIAL & ECONOMIC DEVELOPMENT
Director
OFFICE OF PUBLIC INFORMATION
Coordinator
OFFICE OF INTER-AGENCY AFFAIRS
Coordinator
EXECUTIVE SECRETARIAT
Administrative Assistant
DIVISION OF MANAGEMENT
Associate Exec. Director
DIVISION OF INSTRUCTION
Associate Exec. Director
S. C. FIRE ACADEMY
OFFICE OF PERSONNEL
Coordinator
OFFICE OF DEVELOPMENT & GRANTS
Coordinators
OFFICE OF LEGAL COUNSEL
Coordinator
OFFICE OF SPECIAL PROJECTS
DEPT. OF FISCAL AFFAIRS
Coordinator
DEPT. OF MANAGEMENT INFORMATION SYSTEMS
Coordinator
DEPT. OF EVALUATION & FIELD AUDIT
Coordinator
DEPT. OF PLANNING & RESEARCH
Coordinator
DEPT. OF CURRICULUM & INSTRUCTION
Coordinator
DEPT. OF STUDENT SERVICES
Coordinator
DEPT. OF MANPOWER SERVICES
Coordinator
DEPT. OF CONTINUING EDUCATION
Coordinator

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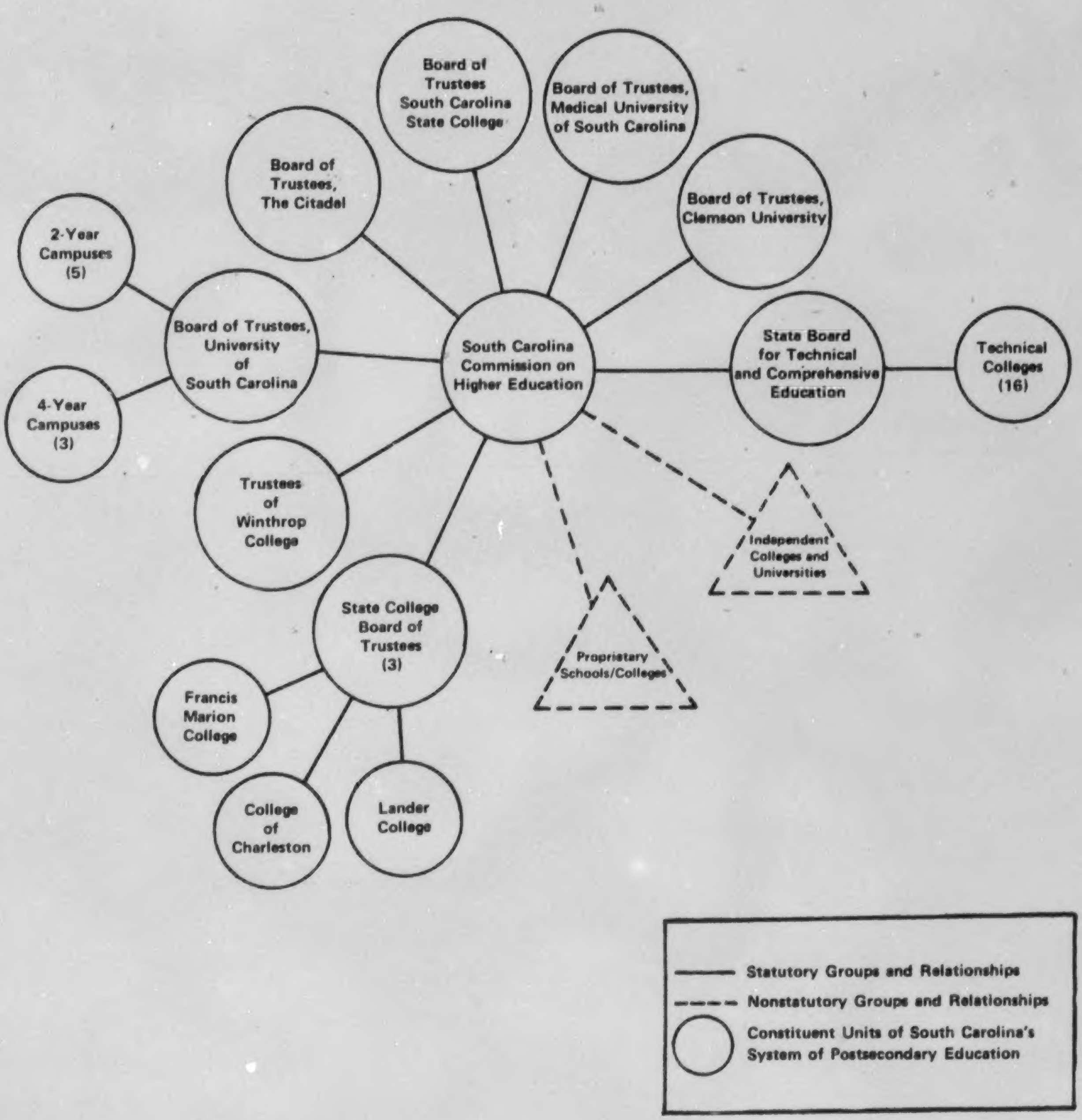
CHART 6

SOUTH CAROLINA'S
SYSTEM OF POSTSECONDARY EDUCATION


Board of Trustees South Carolina State College
Board of Trustees, Medical University of South Carolina
Board of Trustees, The Citadel
Board of Trustees, Clemson University
2-Year Campuses (5)
Board of Trustees, University of South Carolina
South Carolina Commission on Higher Education
State Board for Technical and Comprehensive Education
Technical Colleges (16)
4-Year Campuses (3)
Trustees of Winthrop College
Independent Colleges and Universities
State College Board of Trustees (3)
Proprietary Schools/Colleges
Francis Marion College
College of Charleston
Lander College
Statutory Groups and Relationships
Nonstatutory Groups and Relationships
Constituent Units of South Carolina's System of Postsecondary Education

STATE BOARD FOR TECHNICAL AND COMPREHENSIVE EDUCATION COMPOSITION AND RESPONSIBILITIES

The State Board for Technical and Comprehensive Education (hereinafter referred to as the State Board) consists of eight members, appointed by the Governor for terms of six years and until successors are appointed and qualified. One member is appointed from each congressional district, with the advice and consent of the legislative delegations of the congressional district involved, and must be a resident hereof. There are two at-large members appointed by the Governor. The initial terms of office of State Board members representing congressional districts were for a period of years corresponding to the numerical designation of their respective districts. The initial terms of office of the two at-large members were for three and six years, determined by lot. In addition, the State Superintendent of Education and the Executive Director of the State Development Board serve as ex officio members of the State Board. The chairman is elected by the State Board from among its membership. The Board has within its jurisdiction, in accordance with the provisions of Act 654 (1976), all state-supported technical institutions and their programs that are presently operating and any created in the future. The powers of the Board are:

1. To approve all postsecondary vocational, technical, and occupational diploma and associate degree programs financed in whole or in part by the state and leading directly to employment.

2. To continue to emphasize the special schools programs which provide training for prospective employees for new and expanding industry.

3. To develop and maintain short and long-range plans for the South Carolina Technical Education System.

4. To establish salary ranges for unclassified institutional employees.

5. To be responsible for the state-level development, implementation, coordination, and operation of high quality post-high school vocational, technical, and occupational diploma and associate degree courses and programs financed in whole or in part by state funds; such courses and programs to be characterized by a continuing strong emphasis on the employment needs of the state, the communities, and people of South Carolina.

6. To establish criteria for and approve the awarding of certificates, diplomas, and associate (but not baccalaureate) degrees to students who successfully complete authorized and prescribed courses and programs of study and training.

7. To participate in the various programs of federal aid to public, postsecondary, two-year institutions and to the students therein.

8. To accept and administer donations of funds, grants, real property, or equipment from individuals, corporations, foundations, and governmental bodies.

9. To establish a minimum and maximum tuition fee with the approval of the area commissions, any fees charged above or below this established fee schedule to require the approval of the Board and the appropriate area commissions.

10. To require accountability for and maintain inventory records over all donated equipment, all real property, and equipment in the South Carolina Technical Education System which is purchased by or for the institutions and programs regardless of source of funds, all inventory records to identify sources of funds and ownership of all items.

11. To establish criteria for the justification of a new facility or the modification of existing facilities; no new facilities or modifications of existing facilities to occur without the approval of the area commission and the Board, and the location of any such new facility or modification of an existing facility in a particular county to be subject to the approval of a majority of the members of the area commission from that county.

12. To employ an executive director and such other personnel as may be necessary for the Board to fulfill its duties and responsibilities.

13. To file reports on its activities annually, with such recommendations as may be appropriate, to the Governor and General Assembly.

14. To continue the special schools training program for new and expanding industry and business, closely coordinated with the state's economic development efforts.

AREA COMMISSION

While the South Carolina Technical Education System is administered at the state level by the State Board for Technical and Comprehensive Education, fourteen TEC institutions are locally administered by local area commissions consisting of lay representatives of the counties supporting the institutions. Each area commission has been created by legislative action. All appointments to membership on an area commission are made by the Governor upon the recommendations of the legislative delegation or county board of education. Act 654 (1976) specified that in local governance, the area commissions shall:

1. Adopt and use a corporate seal.
2. Adopt such bylaws, rules, and regulations for the conduct of business and the expenditure of their funds as they may deem desirable.
3. Acquire sites and construct and equip thereon appropriate facilities in accordance with the Act; all real property is the possession of the area commission regardless of the source of funds for its purchase or construction, except for those campuses currently owned by the state; all personal property purchased with local funds is the possession of the area commission.
4. Acquire by gift, purchase, or otherwise all kinds and descriptions of real personal property.
5. Accept gifts, grants, donations, devises, and bequests.
6. Provide appropriate supervision of the maintenance of any facility established to promote postsecondary vocational, technical, and comprehensive education.
7. Exercise responsibility for the operation, maintenance, and improvement of institutional facilities.
8. Employ the institutional chief administrative officer from a list of at least three candidates recommended by a committee consisting of the chairman of the area commission or designated commission member, the chairman of the State Board or designated State Board member, and one area resident appointed by the two aforementioned persons.
9. Employ such other personnel as may be deemed necessary.
10. Establish, promulgate, and enforce reasonable rules and regulations for the operation of their facilities.
11. Operate their affairs on a fiscal year beginning on July first each year and ending June thirtieth of the succeeding calendar year.
12. Expend any funds received in any manner consistent with their approved budget and in accordance with the purposes for which the funds were made available, including the proceeds derived from any bonds issued by the county or counties to defray any costs incident to the establishment of adequate facilities for the program and thereafter to expend such funds for the operation, maintenance, and improvement of the facilities.
13. Exercise the right of eminent domain in the geographical area served by each respective institution.
14. Apply for, receive, and expend moneys from all state, local, and federal governmental agencies.
15. Keep full and accurate accounts of receipts and expenditures and make monthly reports in accordance with uniform procedures established for the system, and within ninety days following

the close of the fiscal year, cause a complete audit of institutional affairs to be made by an independent certified public accountant with copies of the audit report and related documents to be delivered concurrently to the area commission and the State Board; the area commission shall make copies available to legislative delegations or county governing bodies participating in the funding of the institution.

16. Prepare and submit budgets for review by the county governing bodies participating in the funding of the individual institutions and to the State Board for approval in accordance with the methods and procedures established by each of the bodies or agencies involved; local tax revenue budgets shall require the approval of the county governing bodies.

17. Award certificates, diplomas, and associate (but not baccalaureate) degrees to students who successfully complete authorized and prescribed courses and programs of study and training.

18. Exercise such other powers as may be provided for them by the legislation which established and regulates the particular area commission.

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DELIVERY SYSTEM

Legal Authority: Act 1268 of the Code of Laws of South Carolina 1972, as amended by Act 654 of the Code of Laws of South Carolina, 1976.

The state Techncial Education System is characterized by its blending of local governance of the individual institutions by area commissions, and statewide coordination, budgetary control, and support by the State Board. Working closely together since establishment of the system in 1961, the area commissions and the State Board enjoy a relationship based on ingenuity, innovation, cooperation, and mutual respect. Understanding the responsibilities of each and the nature of their shared responsibilities, they administer a complex program of educational and industrial services which is important to the continued economic growth and development of South Carolina.

Act 1268 of the Code of 1972, as amended by Act 654 (1976), which established the State Board for Technical and Comprehensive Education and specifies its purposes, functions and authority, provides for continuation of the established policy of full participation at the local level in programs subject to state level policy and budgetary control through the State Board.

Within the state Technical System, fourteen of the sixteen TEC institutions operate under local area commissions. Thirty-two of the state's 46 counties have a legal obligation to provide support to a local TEC institution. Seven counties without contractual obligation are served by two TEC centers, Beaufort TEC and Denmark TEC, which are administered directly by the State Board. These institutions were operated as trade schools under the State Board of Education, and as yet, local financial support and governance have not been provided for them. In the past, both institutions provided instruction at the secondary level through agreements developed with local school officials. Beaufort TEC, however, no longer provides this service, since secondary facilities have been constructed in that county.

A third institution, Williamsburg Technical, Vocational, and Adult Education Center, also provides secondary vocational training for high school students as well as postsecondary occupational and technical training. This institution has unique statutory requirements to provide education for out-of-school persons who require basic skills development prior to their gainful employment.

Shown below are the TEC institutions and the counties providing financial support for their operations.

Institutions	Supporting Counties
Aiken Technical College	Aiken
Chesterfield-Marlboro Technical College	Chesterfield, Marlboro
Florence-Darlington Technical College	Florence, Darlington
Greenville Technical College	Greenville
Horry-Georgetown Technical College	Horry, Georgetown
Midlands Technical College	Richland, Lexington
Orangeburg-Calhoun Technical College	Orangeburg, Calhoun
Piedmont Technical College	Greenwood, Abbeville, Laurens, Newberry, McCormick, Saluda, Edgefield
Spartanburg Technical College	Spartanburg
Sumter Technical College	Kershaw, Lee, Clarendon, Sumter
Tri-County Technical College	Anderson, Oconee, Pickens
Trident Technical College	Berkeley, Charleston, Dorchester
Williamsburg Technical, Vocational, and Adult Education Center	Williamsburg
York Technical College	York

Map 3 shows the locations of the 16 institutions in the state Technical Education System.

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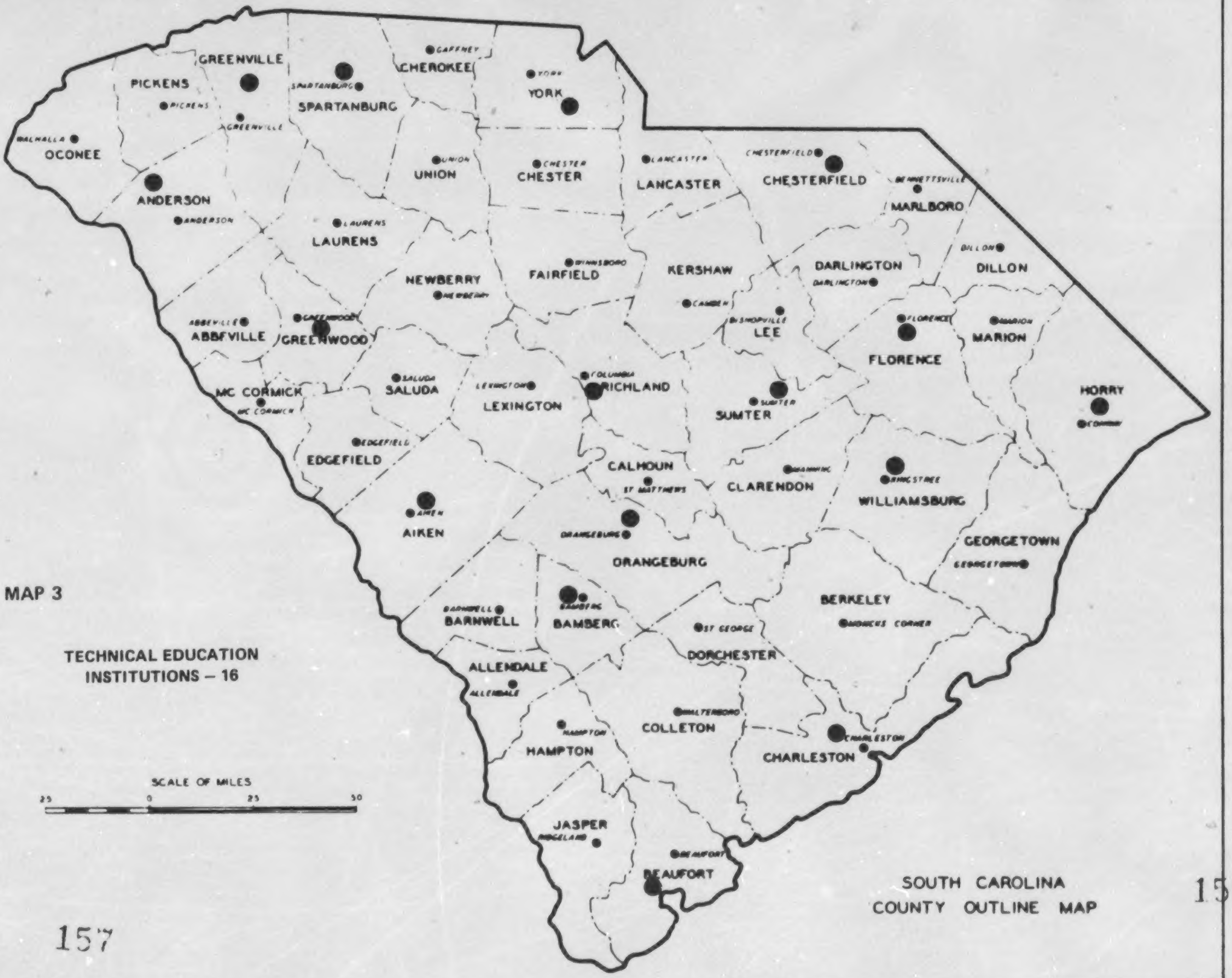

GREENVILLE
PICKENS
PICKENS
GREENVILLE
WALHALLA
OCONEE
ANDERSON
ANDERSON
SPARTANBURG
SPARTANBURG
GAFFNEY
CHEROKEE
YORK
YORK
UNION
UNION
CHESTER
CHESTER
LANCASTER
LANCASTER
CHESTERFIELD
CHESTERFIELD
BENNETTSVILLE
MARLBORO
LAURENS
LAURENS
NEWBERRY
NEWBERRY
WINNSBORO
FAIRFIELD
KERSHAW
CAMDEN
DARLINGTON
DARLINGTON
DILLON
DILLON
ABBEVILLE
ABBEVILLE
GREENWOOD
GREENWOOD
BISHOPVILLE
LEE
FLORENCE
FLORENCE
MARION
MARION
MC CORMICK
MC CORMICK
SALUDA
SALUDA
LEXINGTON
LEXINGTON
COLUMBIA
RICHLAND
SUMTER
SUMTER
HORRY
CONWAY
EDGEFIELD
EDGEFIELD
CALHOUN
ST MATTHEWS
MANNING
CLARENDON
KINGSTREE
WILLIAMSBURG
AIKEN
AIKEN
ORANGEBURG
ORANGEBURG
GEORGETOWN
GEORGETOWN
BERKELEY
MONCKS CORNER
BARNWELL
BARNWELL
BAMBERG
BAMBERG
ST GEORGE
DORCHESTER
ALLENDALE
ALLENDALE
WALTERBORO
COLLETON
HAMPTON
HAMPTON
CHARLESTON
CHARLESTON
JASPER
RIDGELAND
BEAUFORT
BEAUFORT
SCALE OF MILES
25
0
25
50
SOUTH CAROLINA
COUNTY OUTLINE MAP
S C STATE HIGHWAY DEPT - 1952

MAP 3

TECHNICAL EDUCATION
INSTITUTIONS – 16

FUNDING OF TECHNICAL COLLEGES AND CENTERS

The operating costs of educational programs in the technical-institutions are paid through a combination of state-allocated funds, local funds, and student fees. At present, approximately 73 percent of the total cost of operation of the institutions is paid from state-allocated funds. The state pays the entire cost of instructional programs; local funds and tuitions are earmarked specifically for the maintenance of the facilities and equipment and for expendable materials and supplies. Tuition rates are established independently by each institution, although the Board has established minimum and maximum rates which may be changed.

The state appropriation for the operation of each institution is based on the budgetary allocation per annual FTE inclusive of summer programs, evening programs, etc.), and is based on an allocation match which makes provision for: a) the differential cost per FTE in institutions of different sizes; and b) program-by-program differential cost. The actual budget for an individual institution is further defined in terms of the priorities of the programs to be offered.

For technical colleges and centers and for area vocational centers serving multiple school districts, the local funds for the support of instructional programs and facilities are based on either: a) a prorated allocation of costs based on either the distribution of the population within the district or head count enrollments; or b) a uniform levy assessed throughout the district. Specific provisions for the allocation of operation costs are established by local option in the charter establishing the institution or joint program.

INSTRUCTIONAL PROGRAMS AND FUNDING POLICIES

The instructional programs and funding policies of the State Technical Education System are outlined below.

A. Unrestricted Programs	Funding Policies
1. Technical Education a. Associate Degree Objective b. Two-Year Diploma Objective c. One-Year Diploma Objective d. Undetermined Objective	State funds — allocated on FTE (credit hour) basis.
2. Continuing Education a. Occupational Advancement b. Basic Studies/GED c. Apprenticeship	State funds — allocated on CEU (contract hour) basis.
3. Secondary Vocational Education	Contracts — with local school districts; supplementary support from state funds.
4. Community Service a. Personal Interest b. Conferences/Workshops	Self-sustaining — from student fees and other charges.
B. Restricted Programs	
1. State a. Special Schools	State funds — reimbursement from separate state budget of the Division of Industrial Services.
b. Contracted Adult Literacy	Contracts with SDE (Office of Adult Education) or other organization or agency.
c. Other	Contracts with and grants from other state agencies.
2. Federal a. Manpower Development	Federal funds — under contract, grant, or arrangement with Governor's Office (Division of Manpower Services).
b. Other	Federal funds — under contract with or grant from federal agencies.
3. Non-Governmental	Contracts with and grants from organizations other than state and federal agencies.

RELATIONSHIP OF TECHNICAL EDUCATION AND THE STATE DEVELOPMENT BOARD

New and expanding industries have not selected South Carolina accidentally as their choice for plant locations but have made this choice after a great deal of thoughtful deliberation. One of the key elements in their choice has been the close relationship between the State Development Board, the State Board for Technical and Comprehensive Education, and other state and local agencies and organizations.

Through this relationship, the State Development Board has been able to help promote South Carolina's economic development and industrialization in a mutually beneficial and well-planned manner. Industries considering South Carolina for new or expanding industrial locations are made aware, through the Development Board, of the tremendous manpower resources and educational training capabilities of South Carolina's postsecondary technical education system and its secondary vocational education system. When highly specialized industry seeks a location capable of providing highly skilled, technologically advanced manpower, the State Development Board works closely with the state Technical Education System to develop a special schools program capable of quickly meeting the diversified interests of industrial specialization. Through this well-coordinated effort the State Development Board effectively promotes South Carolina as a source of readily available skilled manpower and at the same time assures continued excellence in South Carolina's occupational education program, which is geared to meeting the specialized needs of contemporary industry. By thus contributing to South Carolina's economic growth, the Development Board promotes industrial utilization of South Carolina's trained manpower and also requires that the educational delivery systems maintain high technology training capability for specialized needs, both of which further support the economic development of the state.

Apparently the relationship between TEC, other educational delivery systems, other agencies, and the Development Board must be one that works. In 1977 the Development Board reported $1.24 billion in announced capital investment which should generate almost 18,000 jobs, truly an effective effort in utilizing South Carolina's most important resource, its people.

ORGANIZATION AND GOVERNANCE OF MANPOWER (CETA) PROGRAMS

OFFICE OF THE GOVERNOR, MANPOWER DIVISION

The Office of the Governor, Manpower Division, is the administrative arm of the statewide consortium in South Carolina of programs under CETA. This consortium, formed by a multi-jurisdictional agreement, is the prime sponsor.

The role of the prime sponsor under the Comprehensive Education and Training Act of 1973 is to develop a comprehensive manpower program to meet the needs of disadvantaged, unemployed, and underemployed individuals. This role includes responsibilities both in planning and in implementation.

The prime sponsor must demonstrate effective methods for collecting data and assessing needs in order to provide meaningful training activities. These activities should include creation of job opportunities, skill training, general education, and the necessary supportive services which are needed to enable the individuals to secure employment at their maximum capacity.

The legislation requires that the prime sponsor appoint a State Manpower Services Council composed of representatives from state and local agencies, business and labor, local governments, and community-based organizations. The Council will review the plans of the prime sponsor and make recommendations to ensure a more effective coordination of available resources in meeting the overall manpower needs of the state.

The legislation requires that the prime sponsor appoint a State Manpower Services Council composed of representatives from state and local agencies, business and labor, local governments, community-based organizations and the various segments of the state's population. The Council will review the plans of the prime sponsor and make recommendations to ensure a more effective coordination of available resources in meeting the overall manpower needs of the state.

After the planning process is complete, the prime sponsor is accountable for ensuring that all programs are implemented and conform to the federal regulations. These two objectives are accomplished by the following:

Field Operations	Contracting Technical Assistance Monitoring Evaluation Modification
Management Information	Data Collection Record Monitoring
Planning	Data Analysis Program Evaluation Program Recommendations
Finance	Financial Compliance Financial Analysis

Criteria developed to avoid duplication between manpower training programs and vocational education programs include the following:

1. Participation of the Office of Vocational Education on the State Manpower Services Council.

2. Participation of a representative from the Office of the Governor, Manpower Division, on the State Vocational Education Planning Committee.

3. Coordination of program planning by local educational agencies with CETA.

4. The utilization of a common manpower data base, provided by the South Carolina Employment Security Commission, for program planning by the Office of Vocational Education and CETA.

DELIVERY SYSTEM

The State Board for Technical and Comprehensive Education (TEC) provides the primary delivery system for vocational training funded through CETA. The prime sponsor selected TEC for this responsibility because of its longstanding involvement in manpower training, its place in the community in meeting the skill needs of business and industry, and its wide range of training alternatives.

Specific services provided by TEC are orientation and assessment, counseling, coaching, developmental education, classroom training referrals, and limited follow-up. This training is conducted in the TEC institutions as shown in the preceding section.

The prime sponsor also subcontracts with the State Department of Education, Office of Vocational Education, to provide vocational training in selected skill shortage occupations where a TEC facility is not located or does not have the required training capabilities. The Office of Vocational Education is also greatly involved in providing training under recent "youth-oriented" CETA legislative amendments.

Since the vocational training requirements vary, classes are negotiated through regional planning boards located throughout the state. The responsibility for the allocation of funds and evaluation of the training received rests with the prime sponsor.

The organization of the Manpower Division of the Governor's Office and the flow of CETA funds in South Carolina are shown on Charts 7 and 8, respectively.

CHART 7

MANPOWER DIVISION ORGANIZATION

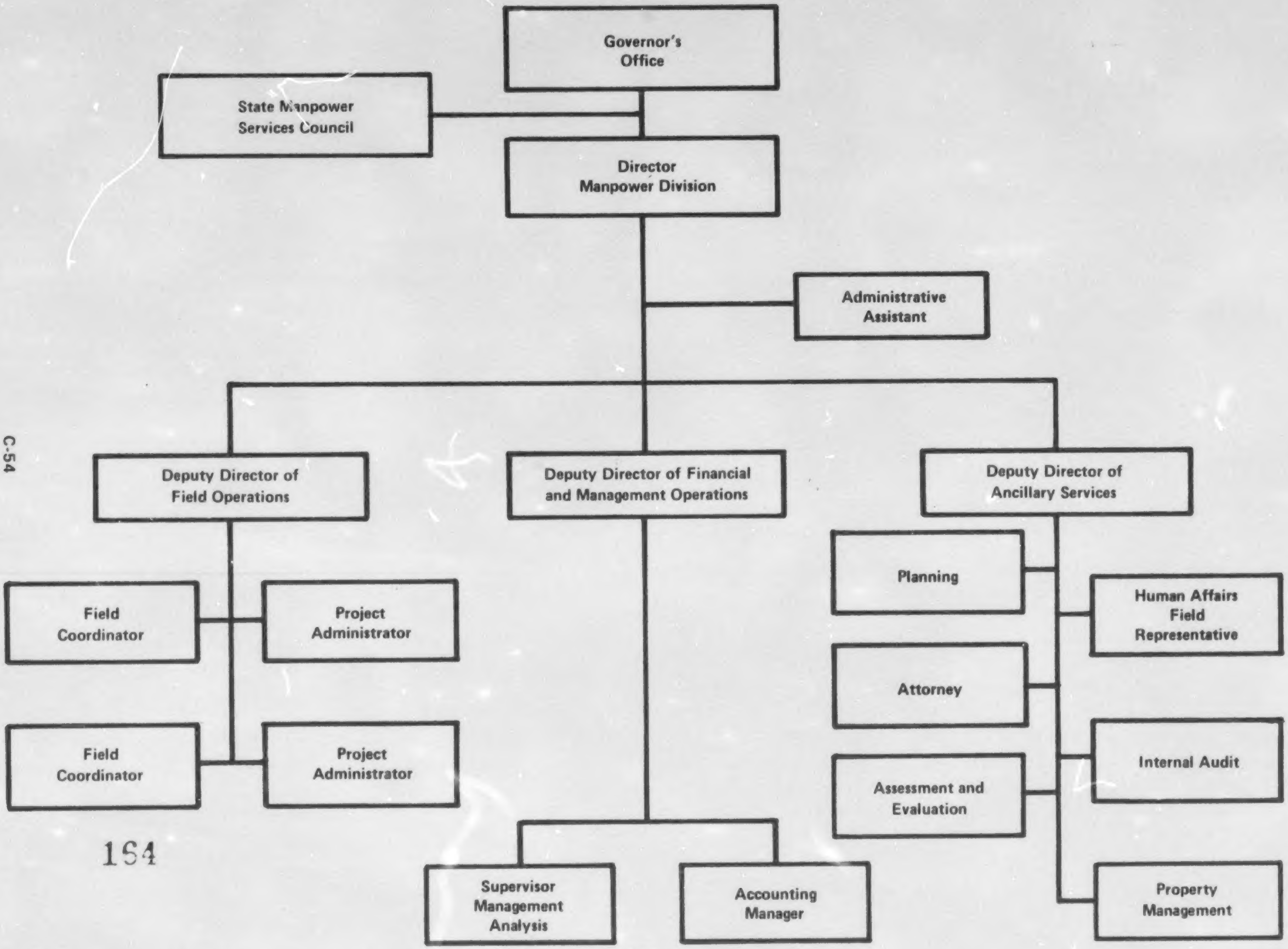
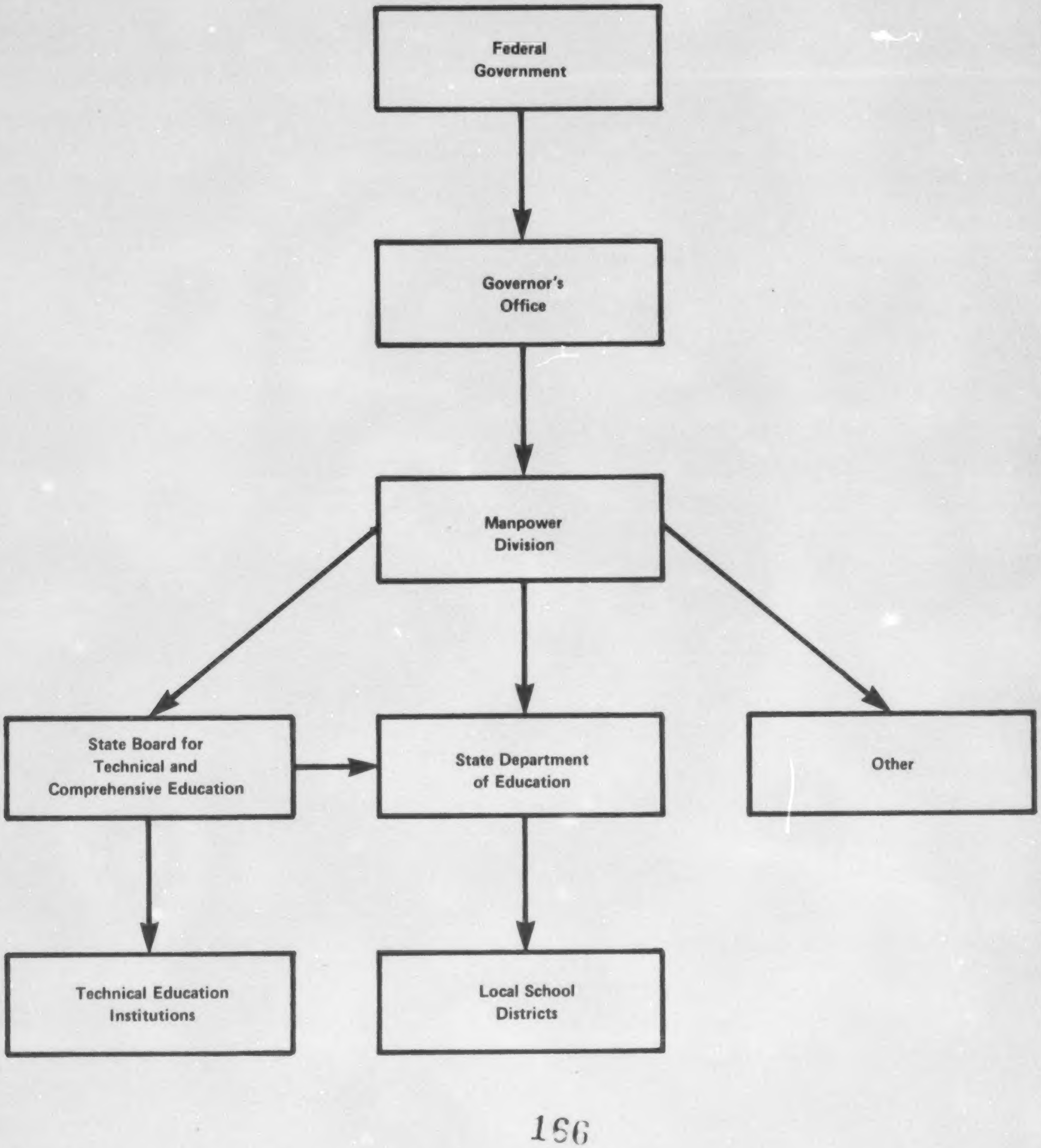

Governor's Office
State Manpower Services Council
Director Manpower Division
Administrative Assistant
Deputy Director of Field Operations
Deputy Director of Financial and Management Operations
Deputy Director of Ancillary Services
Field Coordinator
Project Administrator
Field Coordinator
Project Administrator
Supervisor Management Analysis
Accounting Manager
Planning
Human Affairs Field Representative
Attorney
Internal Audit
Assessment and Evaluation
Property Management

CHART 8

FLOW OF CETA-ADMINISTERED FUNDS


Federal Government
Governor's Office
Manpower Division
State Board for Technical and Comprehensive Education
State Department of Education
Other
Technical Education Institutions
Local School Districts

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ECONOMIC AND EMPLOYMENT PROJECTIONS

The projections in this section come primarily from *A Forecast to 1985: The South Carolina Economy*, Division of Research and Statistical Services, South Carolina Budget and Control Board, June, 1975. This report was done late enough to consider the impact on South Carolina of the 1974-1975 recession. A more recent forecast, *South Carolina and a Policy of Balanced Economic Growth for the United States*, compiled for the Governor's Conference on Economic Development, December 1, 1977, was also consulted, as well as several other economic and employment projections of recent origin. These are indicated in the bibliography at the end of the section.

While economists generally expect that the trends of the national economy will establish the context in which the economy of South Carolina will function over the next few years, they also expect that the state's economy will continue its twenty-year pattern of a faster rate of growth than the national economy, at least as reflected by most economic indicators. The economy of South Carolina will thus be influenced primarily by the same long-term basic forces that shape the national economy, as modified and tempered by the 1974-1975 recession and the ever-possible energy supply restrictions and shifts to alternative energy sources. The upshot of these factors will be a reduction in the growth rate for the 1974-1985 period, as compared to that anticipated prior to the recession.

Considered in 1975 as being severe enough to have caused an economic slowdown that would not be made up even by 1985, the recession was viewed as altering the shape, but not the essence, of the economy and recent economic predictions over the long run. In South Carolina, because of the nature of the recession, the recovery, and the makeup and particular stage of development of the economy, it was believed that the recession would result in less severe long-range adverse effects and that the economy would show a stronger recovery than nationally. Projections were that the economy of the state would continue its history of more vigorous growth than that of the nation, assuming that the energy situation would not work to South Carolina's greater disadvantage.

National economic growth during the 1975-1985 period was indicated in the State Budget and Control Board report by its forecast of an average annual GNP growth of 5.5% during 1975-1980 and of 3.5% during 1981-1985.[1] The GNP growth is the major influence on the South Carolina economy and all subnational economies, serving as the basic stimulus to their growth patterns of socio-economic activity. Its pattern of ebb and flow during the forecast period was described as resulting at least partly from five basic economic and demographic forces, summarized as follows:[2]

1. Underinvestment during the previous 15 years
2. Devaluation of the dollar
3. The impact of energy and its higher costs relative to other inputs
4. Continuing high prices for raw materials
5. The slowdown in population growth

These five forces, working in combination and tempered by the recession, indicated an economy during the 1975-1985 period characterized by:

1. A strong investment sector after 1980 compared with the preceding ten years
2. A growth of real GNP of from 3% to 4%
3. A reallocation of resources to adjust to the energy situation and to energy prices
4. A rate of inflation twice that of the postwar historical rate
5. An unemployment rate of around 5% by 1985
6. A slower growth in the labor force

Compared with the national economy, the economy of South Carolina will exhibit more vigor, as reflected below:

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Real Personal Income – Average Annual Growth Rate[3]

	S. C.	U. S.
1975-1980	6% +	4.5%
1981-1985	4.5%	4%

S. C. Per Capita Income – Percent of National Average

1974: 78% 1977: 80%
1985: 82%[4] 1985: 85%[5]

Real Growth Rate – Annual [6]

	S. C.	U. S.
1978-1985	4.5%–5.5%	3%–4%

The State Budget and Control Board report made specific forecasts regarding the combined influence of the basic economic and demographic forces listed above and cyclically-related forces at work in the earlier years of the forecast period, on each of the major sectors of the South Carolina economy, These forecasts are summarized below; projections have been made in relation to 1975 employment figures, which means that they include the increases necessary to offset the declines in employment experienced between 1974 and 1975 in all sectors except trade, service, and transportation, communication, and public utilities.[7] (See also Tables 7 and 8.)

Nonagricultural Employment

Following recovery from the 1974-1975 recession, South Carolina will experience a significant increase in nonagricultural employment; during the 1975-1980 period, growth in all sectors except trade and transportation, communication, and public utilities will exceed that recently experienced in the state and that predicted nationally during this period. Compared to their 1970-1975 average annual growth rates, manufacturing and contract construction will expand faster than any other nonagricultural sector. This represents a strong and fast recovery from the recession.

On the other hand, growth in transportation, communication, and public utility employment will slow during 1975-1980, and will show only a slight recovery during 1981-1985. The growth rate will remain below the 1970-1975 rate. Trade employment will continue to experience a slowdown in growth rate.

All other sectors--government, services, and finance, insurance, and real estate--will experience an employment growth pattern similar to that for total nonagriculture employment during the entire forecast period of 1975-1985.

Manufacturing Employment

Employment in this sector will increase more rapidly during 1975-1980 than it did during 1970-1975. After 1980, the rate will be similar to long-term historic projections. The growth pattern will be similar to the national pattern, although the rate will remain higher than nationally.

The rapid growth during 1975-1980 represents a strong recovery from the recession, especially in textiles and apparel. The state will gain not only from new plant construction but also from demands for durable goods products from plants already in existence.

The major potential problem which might alter this predicted surge in manufacturing is energy. If another energy crisis develops which is more serious or of a more chronic nature than that of the oil embargo, or if energy constraints impact more seriously on the state relative to the rest of the nation, the rate of manufacturing employment growth would certainly be slowed down.

Barring this, manufacturing in South Carolina should create almost 163,000 new jobs between 1975 and 1985, or a net increase of nearly 139,000 above the 1974 level.

Trade Employment

The rate of growth in trade employment in South Carolina will continue to slow down throughout the 1975-1985 period, illustrating a more refined economic base. In the past, as manufacturing expanded and personal income grew, the historically small trade sector in South Carolina grew to meet the increased demands. The trade sector is now more sophisticated and will expand at a much slower rate and in a pattern similar to that of the rest of the nation.

Trade employment will increase marginally to maintain current per capita level of service as consumer activity in the state increases. This increase will represent 63,000 new jobs in the sector between 1975 and 1985.

Government Employment

Employment in this sector will continue to expand at historic rates in South Carolina. This steady growth reflects the growing urbanization of the state and the accompanying need for more positions in state and local governments to serve the urbanized population; this has already occurred nationally. Federal employment in the state will increase only slightly during the period, which is similar to the national pattern of modest expansion.

Over 98,000 new positions in government--mainly state and local--will occur between 1975 and 1985, representing a net increase of more than 91,000 since 1974.

Contract Construction

This sector will experience a relatively slow recovery from the recession, and was not expected to attain its pre-recession (1974) level of employment until 1978. Since housing construction in South Carolina has traditionally been small scale and noncontractual, this sector is primarily oriented to nonresidential construction. Therefore, as business recovers and resumes plans for expansions and new plants, contract construction in the state will be stimulated by these demands.

There should be nearly 49,000 new jobs in contract construction between 1975 and 1985; compared to the 1974 level, this represents a net increase of over 32,000.

Service Employment

Service employment in South Carolina will experience a rapid growth rate in the 1975-1985 period. This illustrates the further refinement of the South Carolina economy, as the services sector replaces trade as the fastest-growing ancillary sector. The rate will begin to slow after 1980, in accordance with the overall slowdown in the state's economy, but by 1985 there will be more than 109,000 new jobs in the service sector in South Carolina, as compared to the 1975 level.

Finance, Insurance, and Real Estate Employment

The average annual rate of growth in employment in this sector will average over 6% during 1975-1980. This represents a recovery from the recession, when demand for these services declined and resulted in an employment drop in 1975. The recovery of the sector will be stimulated by the recovery of the housing industry and by the return of business to long-term money markets.

After its initial recovery, growth in the sector will gradually slow to reflect that of total nonagricultural employment. This will result in the retention of the historic ratio of employment in finance, insurance, and real estate to total nonagricultural employment. By 1985, there will be over 23,000 new jobs in this sector, or a net of 21,000 more than in 1974.

Transportation, Communication, and Public Utility Emoloyment

This sector will experience an extremely slow growth rate during 1975-1980; the annual rate will be only about 1.5%, compared to an annual rate of 4.7% during 1967-1974. This slow growth reflects the high prices for energy relative to other prices.

Assuming that new energy sources become available in the late 1970's and early 1980's and that energy prices relative to other prices decline, employment in this sector should make modest gains during 1981-1985. Growth during the total forecast period of 1975-1985 should average slightly over 2% per year. This will result in almost 10,000 new jobs in the sector by 1985.

The report prepared in 1977 for the Governor's Conference on Economic Development, *South Carolina and a Policy of Balanced Economic Growth for the United States,* included a section called "Policy Implications," which was based on the current economic outlook and called for development efforts with specific targets and goals for 1985. These are summarized as follows:[8]

Reduce nine-year lag between S.C. and U.S. per capita income:
There is currently about a nine-year lag which latest projections indicate will be reduced to five years by 1985. By intensifying efforts to attract fastest-growth industries such as chemicals, rubber and plastics, instruments, and electrical machinery, South Carolina should be able to reduce the lag to four or even three years by 1985.

Narrow gap between S.C. per capita income and that of neighboring states:
Presently there is a five percent gap between South Carolina per capita income and that of the states of Georgia and North Carolina and of the Southeast region. Current projections indicate that this gap will be closed by 1985, but by concentrating on attracting fastest-growth industries within a context of a generally sound economic development effort, South Carolina's per capita income could actually surpass these others by 1985.

Assure the employment of 1.5 million South Carolinians:
This actually consists of two targets:

a. create 400,000 net new jobs for people entering the workforce for the first time; and
b. create an additional 265,000 additional new jobs for current workers who will be displaced by automation, competition from other markets. technical advances, and obsolescence.

To achieve this goal, 83,000 gross new jobs would have to be provided each year from 1978-1985 (50,000 net new jobs and 33,000 replacement jobs). Between 1967 and 1977, approximately 58,000 gross new jobs were available annually (35,000 net new and 23,000 replacement).

To accomplish these goals, South Carolina must continue to provide the economic and social climate required to attract industry that is new and new to the state. By offering good technical, vocational, and liberal arts education, favorable wage rates, a competitive tax structure--all fo which are conducive to expanded investment in the state--South Carolina would continue to attract those industries which can do more toward helping to meet the economic and social goals stated.

TABLE 7

SOUTH CAROLINA

COMPONENTS OF NONAGRICULTURAL EMPLOYMENT

Selected Years, 1967–1985

Year	Manufacturing	Wholesale-Retail Trade	Government	Contract Construction	Service	Finance, Insurance, and Real Estate	Transportation, Communications, and Public Utilities
1967	319,600	124,300	128,400	48,100	75,300	25,900	31,200
1969	342,300	137,100	140,800	49,400	84,600	28,400	35,600
1971	337,300	147,800	156,700	54,500	92,700	31,200	38,400
1974	375,200	177,800	179,300	78,200	120,300	39,500	43,100
1975	351,200	183,400	172,400	61,700	123,400	37,200	43,100
1977	388,900	195,900	189,600	74,800	143,000	42,100	43,900
1978	402,800	203,000	196,800	78,300	152,200	43,900	44,400
1980	442,800	218,600	222,300	94,900	174,400	49,600	46,300
1982	470,600	232,500	240,900	101,500	196,000	53,900	49,000
1984	501,000	242,000	261,700	108,900	220,700	58,800	51,700
1985	514,100	246,400	270,700	110,500	232,700	60,500	52,900

SOURCE: *A Forecast to 1985: The South Carolina Economy*, Division of Research and Statistical Services, South Carolina Budget and Control Board (Columbia, 1975), pp. 28-29.

TABLE 8

SOUTH CAROLINA COMPONENTS OF NONAGRICULTURAL EMPLOYMENT

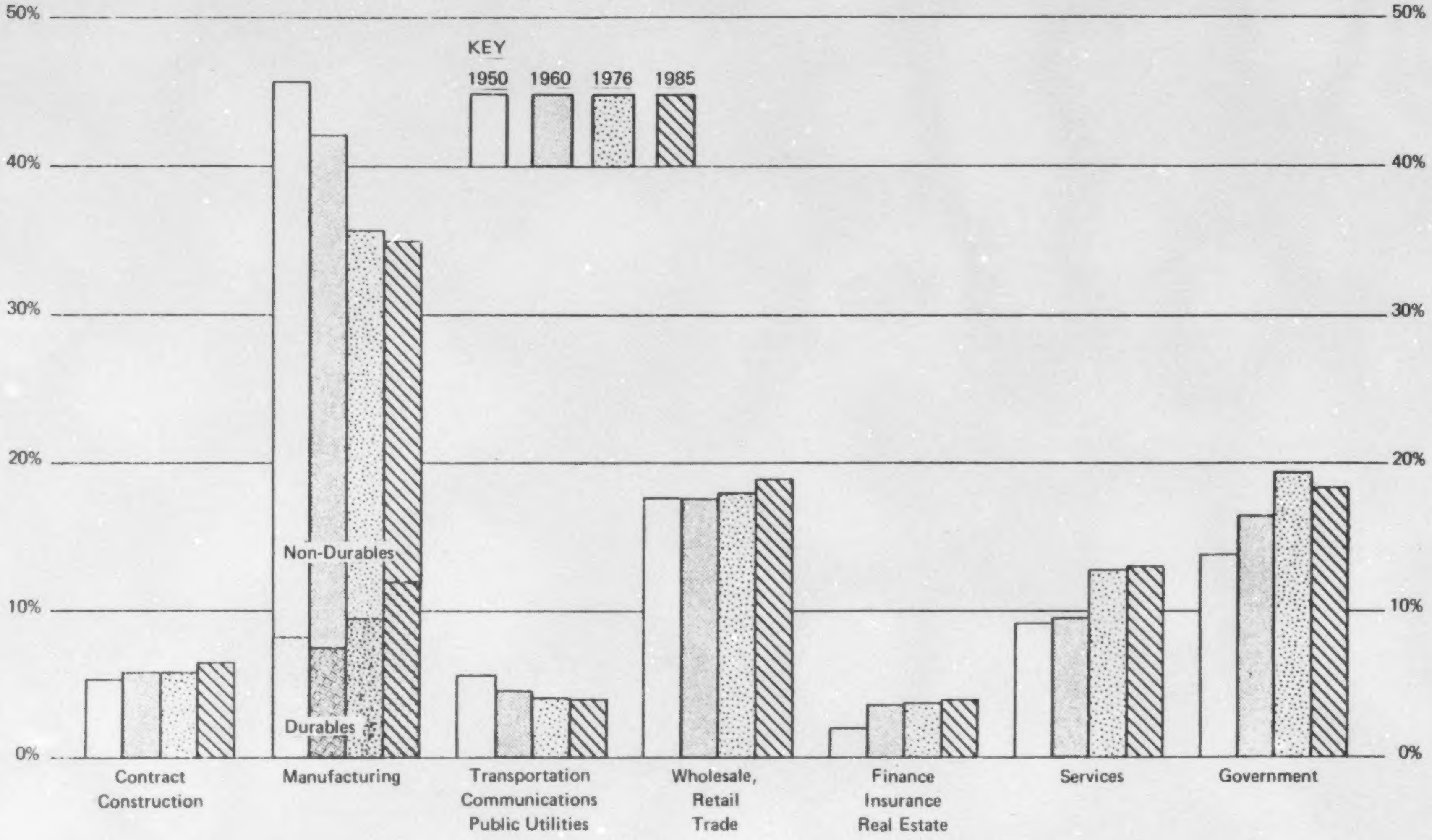
Summary, 1975–1985

	Manufacturing	Trade	Government	Contract Construction	Service	Finance, Insurance, Real Estate	Transportation, Communication, Public Utilities	Total Non-Agricultural
1975	351,200	183,400	172,400	61,700	123,400	37,200	43,100	972,400
1980	442,800	218,600	222,300	94,900	174,400	49,600	46,300	1,248,900
New Jobs	91,600	35,200	49,900	33,200	51,000	12,400	3,200	276,500
% Increase	26.0	19.2	28.9	53.9	41.3	33.3	7.4	28.4
Average Annual Growth Rate, 1975–1980	5.2	3.8	5.8	10.8	8.3	6.7	1.5	5.7
1980	442,800	218,600	222,300	94,900	174,400	49,600	46,300	1,248,900
1985	514,100	246,400	270,700	110,500	232,700	60,500	52,900	1,487,800
New Jobs	71,300	27,800	48,400	15,600	58,300	10,900	6,600	238,900
% Increase	16.1	12.7	21.8	16.4	33.4	22.0	14.3	19.1
Average Annual Growth Rate, 1981–1985	3.2	2.5	4.4	3.3	6.7	4.4	2.9	3.8
1975	351,200	183,400	172,400	61,700	123,400	37,200	43,100	972,400
1985	514,100	246,400	270,700	110,500	232,700	60,500	52,900	1,487,800
New Jobs	162,900	63,000	98,300	48,800	109,300	23,300	9,800	515,400
% Increase	46.4	34.4	57.0	79.1	88.6	62.6	22.7	53.0
Average Annual Growth Rate, 1975–1985	4.6	3.4	5.7	7.9	8.9	6.3	2.3	5.3

SOURCE: Abstracted from Table 4, *A Forecast to 1985: The South Carolina Economy*, Division of Research and Statistical Services, South Carolina Budget and Control Board (Columbia, 1975), pp. 28-29.

CHART 9

DISTRIBUTION OF EMPLOYMENT AS A PERCENTAGE OF TOTAL NON-AGRICULTURAL EMPLOYMENT BY MAJOR CATEGORIES, SELECTED YEARS



SOURCE: *South Carolina and a Policy of Balanced Economic Growth for the United States,* Governor's Conference on Economic Development (Columbia, 1977), p. 26.

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TABLE 9

DISTRIBUTION OF EMPLOYMENT AS PERCENTAGE OF TOTAL NONAGRICULTURAL EMPLOYMENT SOUTH CAROLINA AND UNITED STATES

	1973		1976	
	S. C.	U. S.	S. C.	U. S.
TOTAL NONAGRICULTURAL EMPLOYMENT	100.0	100.0	100.0	100.0
MINING	.2	.8	.2	1.0
CONTRACT CONSTRUCTION	7.2	5.2	5.9	4.5
MANUFACTURING	38.1	26.1	35.6	23.9
Durable Goods	10.1	15.4	9.6	13.9
Lumber & Wood Products	1.7	.8	1.4	.8
Furniture & Fixtures	.5	.7	.4	.6
Stone, Clay & Glass	1.2	.9	1.0	.8
Fabricated Metal Products	1.0	2.0	1.1	1.7
Nonelectrical Machinery	2.3	2.7	2.4	2.6
Electrical Equipment	1.7	2.6	1.5	2.3
Instruments & Related Products	.5	.6	.5	.6
Other Durable	1.2	5.0	1.2	4.4
Nondurable Goods	28.0	10.7	26.0	10.0
Food & Kindred Products	1.4	2.2	1.3	2.2
Textile Mill Products	16.1	1.3	14.3	1.2
Apparel & Other Finished Products	4.8	1.8	4.5	1.6
Paper & Allied Products	1.3	.9	1.3	.9
Printing & Publishing	.6	1.4	.6	1.4
Chemicals & Allied Products	3.1	1.3	3.0	1.3
Other Nondurable	.7	1.6	1.1	1.5
TRANSPORTATION, COMMUNICATION & PUBLIC UTILITIES	4.3	6.0	4.1	5.1
WHOLESALE & RETAIL TRADE	17.5	21.7	18.1	22.3
Wholesale Trade	3.9	5.3	3.9	5.4
Retail Trade	13.5	16.3	14.2	16.9
FINANCE, INSURANCE & REAL ESTATE	3.7	5.3	3.8	5.4
SERVICES & MISCELLANEOUS	11.6	16.9	12.8	18.4
GOVERNMENT	17.3	17.9	19.4	18.8
Federal	3.4	3.5	3.4	3.4
State & Local	14.0	14.4	16.0	15.4

SOURCE: *South Carolina and a Policy of Balanced Economic Growth for the United States*, Governor's Conference on Economic Development (Columbia, 1977), pp. 18 & 20.

TABLE 10

SOUTH CAROLINA

RATE OF UNEMPLOYMENT

1967–1985

Year	Unemployment Rate
1967	4.7
1968	4.4
1969	4.1
1970	4.8
1971	5.4
1972	4.4
1973	4.1
1974	5.9
1975	8.4
1976	7.3
1977	6.6
1978	6.3
1979	5.8
1980	5.1
1981	4.7
1982	4.7
1983	4.6
1984	4.5
1985	4.5

SOURCE: *A Forecast to 1985: The South Carolina Economy*, Division of Research and Statistical Services, South Carolina Budget and Control Board (Columbia, 1975), p.34.

TABLE 11

SOUTH CAROLINA

PERSONAL INCOME

Selected Years, 1967–1985

(Millions of Dollars)

Year	Personal Income (Current Dollars)	Personal Income Constant (1958) Dollars*
1967	5,809	5,080
1969	7,112	5,760
1971	8,377	6,230
1974	11,860	7,300
1975	12,680	7,220
1977	15,553	7,990
1978	17,682	8,680
1980	21,314	9,680
1982	26,120	10,830
1984	30,640	11,660
1985	33,170	12,150

*Personal Income Deflated by the Deflator for Personal Consumption Expenditures Component of GNP (1958=100)

SOURCE: *A Forecast to 1985: The South Carolina Economy*, Division of Research and Statistical Services, South Carolina Budget and Control Board (Columbia, 1975), p. 27.

TABLE 12

FORECAST OF PER CAPITA INCOME

S. C. and U. S.

	Current Dollars			1972 Dollars		
Year	S. C.	U. S.	%	S. C.	U. S.	%
1977	5,600	7,000	80.0	3,900	4,800	81.3
1978	6,100	7,500	81.3	4,100	4,900	83.7
1979	6,600	8,100	81.5	4,200	5,100	84.3
1980	7,200	8,900	80.9	4,400	5,300	83.0
1981	7,800	9,600	81.3	4,500	5,500	81.8
1982	8,500	10,200	83.3	4,700	5,700	82.5
1983	9,300	11,000	84.5	4,900	5,900	83.1
1984	10,200	12,000	85.0	5,100	6,000	85.0
1985	11,200	13,000	86.1	5,400	6,200	87.1
% Increase, 1977–1985	50.0	46.2		27.8	22.6	
Average Yearly Increase	6.3	5.8		3.5	2.8	

SOURCE: Abstracted from *South Carolina and a Policy of Balanced Economic Growth for the United States*, Governor's Conference on Economic Development (Columbia, 1977), ff. p. 9.

TABLE 13

SOUTH CAROLINA

RETAIL SALES

(Millions of Dollars)

Selected Years, 1967–1985

Year	Retail Sales
1967	3,934
1969	4,444
1971	5,697
1974	8,120
1975	8,412
1977	10,590
1978	11,770
1980	14,940
1982	17,910
1984	21,380
1985	23,200

NOTE: Data not comparable with United States Department of Commerce Retail Sales Data.

SOURCE: *A Forecast to 1985: The South Carolina Economy*, Division of Research and Statistical Services, South Carolina Budget and Control Board (Columbia, 1975), p. 30.

TABLE 14

SOUTH CAROLINA

VALUE OF ANNUAL PRODUCT

(Millions of Dollars)

Selected Years, 1967–1985

Fiscal Year

Year	Value of Annual Product of Manufacturing
1967	6,100
1969	7,170
1971	7,970
1974	11,990
1975	11,610
1977	16,600
1978	18,140
1980	22,580
1982	26,960
1984	31,940
1985	34,400

SOURCE: *A Forecast to 1985: The South Carolina Economy*, Division of Research and Statistical Services, South Carolina Budget and Control Board (Columbia, 1975), p. 33.

NOTES

1. *A Forecast to 1985: The South Carolina Economy*, Division of Research and Statistical Services, South Carolina Budget and Control Board (Columbia, 1975), p. 15.

2. *Ibid.*, p. 1–2.

3. *Ibid.*, p. 13.

4. *Ibid.*

5. *South Carolina and a Policy of Balanced Economic Growth for the United States*, Governor's Conference on Economic Development (Columbia, 1977), p. 10.

6. *Ibid.*

7. *A Forecast to 1985: The South Carolina Economy*, pp. 15–21.

8. *South Carolina and a Policy of Balanced Economic Growth for the United States*, pp. 12–13.

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STATE LEGISLATION

With the exception of the South Carolina Education Finance Act of 1977, all vocational education legislation in South Carolina has been enabling legislation, based on federal laws. The legislation for technical education has created and defined the powers and limitations of a state-wide postsecondary technical education system. The following summaries list all pertinent state legislation to date.

A. Vocational Education Legislation.

1. 1917 Act No. 42. This Act accepts the Smith-Hughes Act for South Carolina, and designates the State Board of Vocational Training. The board is authorized to cooperate with local or state agencies for "the advancement of agricultural and industrial education," and the State Treasurer is appointed custodian of federal funds coming to the state under the provisions of the Smith-Hughes Act.

2. 1919 Act No. 34. This Act provides for appropriation of funds for vocational education, specifying that the sum will not be less than the federal appropriation under the Smith-Hughes Act. The funds may be used for the payment of the salaries of teachers, supervisors, or directors of vocational subjects, for the purchase of supplies and equipment to be used by vocational classes, for classes which train teachers of vocational subjects, or for administration of vocational education, including supervision and clerical help.

3. 1966 Act No. 830. This Act allows South Carolina School districts to affiliate with each other for the purpose of promoting vocational education. The school districts thus affiliated are authorized to maintain vocational education facilities and programs serving the entire affiliated area. Procedures for administration, accounting, application for funding, acquisition and maintenance of titles to property, and assurance of equity in taxation must be submitted by affiliating districts for state approval.

4. 1975 Act No. 214. This Act allows South Carolina school districts, without regard to county lines, to join to create vocational school boards "to construct, operate, govern, supervise, manage, and control vocational schools." Each board will consist of six members, selected from members of school boards of trustees for the counties involved. Vocational schools will be funded by the respective district boards involved. Full powers of the board are spelled out, auditing procedures established, and penalties set for unlawful acts against the boards and facilities.

5. 1977 Act No. 163 (South Carolina Education Finance Act). This Act establishes a system of educational funding in South Carolina which will provide to "each student in the public schools of South Carolina the availability of at least minimum educational programs and services appropriate to his needs, and which are substantially equal to those available to other students with similar needs... notwithstanding geographic differences and varying local economic factors." This guarantee of a minimum level of funding is designed to enable school districts to provide at least the defined minimum program within approximately five years. The state will initially assume 70% of the funding, with the remainder to be financed from local revenue sources, each local district contributing its "fair share." The Act covers only "at school" operating costs. It calls for the establishment of an "index of taxpaying ability" for each district, to ensure that each property taxpayer will be treated fairly in relation to all other taxpayers in the state in raising money for local schools. The annual allocation to each school district will be based on counts of students in various programs, with each program assigned a "weight" based on relative cost differences between programs. Pre-vocational and vocational program weightings are higher than the norm.

Local districts are encouraged to employ teachers with advanced degrees through the offer of additional state funds. Local districts are guaranteed by the act that they will not receive less state funding than they now receive, and are allowed to increase the local support effort as they deem necessary "to meet the aspirations of the people of the district." The statewide minimum salary level will be adjusted annually at the same percentage as the base student cost, but no employed certified teacher or administrator will earn less than he did before the Act took effect. Full implementation of the defined minimum program must be the local district's first spending priority. Annual reports from each district describing local programs, pointing out needed changes based on explicit student needs, and proposing specific strategies for improvement must be submitted to the State Board of Education no later than June 30 of each year. Each school must establish an advisory council composed of parents, students, teachers, and representatives of the community to assist in preparing the annual report. The State Department of Education is responsible for assisting local districts in improving programs, correcting deficiencies, and planning staff development, and for adjusting the defined minimum program standards to reflect funding levels. Local school boards must make their annual budgets available to the public.

B. Technical Education Legislation.

1. 1961 Act No. 323. This Act created the Advisory Committee for Technical Training, which was responsible for developing vocational and technical training programs in South Carolina. Although this act was repealed in 1972, the Advisory Committee's activities paved the way for the creation of the State Board for Technical and Comprehensive Education, and for the development of a state-wide system of postsecondary technical education (see below).

2. 1969 Act No. 349. This Act authorized the Advisory Committee for Technical Training to assume control and management of several local trade schools, and to make them part of a growing system of postsecondary local technical education centers.

3. 1971 Act No. 146. This Act authorized the Advisory Committee for Technical Training to apply for federal funds, with the governor as co-applicant. This power now lies with the State Board for Technical and Comprehensive Education.

4. 1972 Act No. 1268. This Act created the State Board for Technical and Comprehensive Education, consisting of eight members (one from each congressional district, two at-large). The law officially gives the Board jurisdiction over all two-year, state-supported, postsecondary, institutions and their programs that "are presently operating and any created in the future," except branches of the University of South Carolina and Clemson University. Two-year institutions are authorized to add first and second year college parallel curricula to technical education centers. The Board is given responsibility for the "development and implementation of an adequate post-high school vocational and technical training program," for devising criteria for the establishment of new two-year institutions and programs, and for contonuing local participation through local boards and advisory committees.

5. 1976 Act No. 654. This Act amends 1972 Act No. 1268. It permits re-appointment of Board Members, authorizes appointments to fill vacancies for unexpired terms, and subjects the Board's actions to approval by the General Assembly. The law gives the Board power of approval by the General Assembly. The law gives the Board power of approval or disapproval authority over "all postsecondary vocational, technical and occupational diploma and associate degree programs financed in whole or in part by the State that lead directly to employment," except programs already operated by other state institutions of higher

learning. The law further states that all courses, programs and institutions within the jurisdiction of the Board "shall be identified and administered as the South Carolina Technical Education System," and that all employees of the System shall be state employees subject to regulations affecting all state employees. The Act requires that, as long as it is feasible, the Technical Education System will maintain an open admissions policy, and establish low tuition and fees. It further permits institutions within the system to contract with local school districts to offer adult literacy courses and secondary-level vocational programs, as well as "two-year college parallel programs." These parallel programs will be coordinated with and approved by the Commission on Higher Education. The Board is responsible for state-level development, implementation, coordination and operation of adequate, high-quality postsecondary vocational, technical and associate degree programs. It may award certificates, diplomas, and associate degrees; participate in federal aid programs; accept and administer donations; establish tuition fees; establish criteria for justifying new or expanded facilities; file annual reports; and continue special schools training programs for new and expanding business and industry.

The law also grants specific powers and responsibilities to the area commissions. Among these, area commissions. Among these, area commissions are given power to acquire sites, and to construct and equip facilities according to the criteria set by the Board; accept gifts, including property; exercise responsibility for operation, maintenance, and improvement of facilities; employ a chief administrative officer and other necessary personnel; establish and enforce reasonable operating rules and regulations; expend funds on a fiscal-year basis; exercise the right of eminent domain; apply for, receive, and expend moneys from all state, local and federal sources; keep full accounting records; prepare and submit budgets; and award certificates, diplomas and associate degrees to students.

1978 Act No. 410. Although this Act reorganizes the South Carolina State Commission on Higher Education, it has several implications for the Technical Education System. Among its many provisions, the Act requires the Commission on Higher Education to develop within one year a "master plan of public higher education," which must include the Technical Education schools. This plan will establish the goal, mission, procedures, and enrollment objectives of each institution of higher learning. It will include a long-range plan, and recommendations for legislation to eliminate duplication of authority among governing bodies of higher education institutions. The Act requires that the master plan "address all major academic and public service programs of the postsecondary institutions in terms of goals and objectives, costs versus benefits to the people of the State, relationship to state and local governmental programs, priority for use of scarce resources within postsecondary education, strategies of instruction and operation and effectiveness of the programs in achieving these goals and objectives." The master plan is to guide the Commission on Higher Education in submitting budget recommendations, and is to provide the basis for future zero-based budgeting. Until the master plan is adopted, there will be a moratorium on all construction and expansion of higher education facilities other than construction already approved by the General Assembly or the State Board for Technical and Comprehensive Education.

The State Board for Technical and Comprehensive Education must submit a single line-item budget to the Commission on Higher Education, representing the total request of all institutions in the Technical Education System. The Commission will then adopt or modify the budget and submit it in a package to the State Budget and Control Board on behalf of all public higher education institutions. The Act specifically states that no new program can be undertaken by any institution of higher education without the approval of the Commission or the General Assembly. These provisions apply to all college parallel, transferable and associate degree programs of Technical and Comprehensive Education institutions, although all other programs and offerings of these institutions are excluded. The Commission has the authority to recommend the termination of any program covered by the Act at any institution of higher education, with the provision that appeal within sixty days is possible. No such terminations can be made, however, until the master plan is approved. With the exceptions of Trident Technical College's property in Berkeley County, the new Palmer College site in Charleston County, and Francis Marion College in Florence County, no higher education institution may construct any new permanent facility at any location other than a currently approved campus or on property immediately contiguous to it without Commission approval.

SYSTEM OVERVIEW

This component is divided into three sections: Input (System) Variables, Process (Program) Variables, and Output Variables (Student Outcomes). "Input" describes the elements which make up the system; "process" describes what occurs within the system; and "output" describes the products of the system.

In most cases, descriptive data or narratives have been used to address the elements of each section and little attempt has been made at discrepancy analysis. However, attention has been called to those situations where little or no reliable information is available, for this in itself indicates a need. When appropriate and available, separate data have been included for the postsecondary (TEC) system.

Each section is subdivided as follows:

Input Variables

- Facilities
- Program Availability
- Faculty and Staff
- Enrollments
- Student Profile

Process Variables

- Course Offerings
- Learning Materials
- Faculty and Staff Development
- Counseling, Guidance, and Job Placement
- Advisory Committees
- Occupational Information (SOICC)
- Vocational-Technical Program Articulation
- Prevocational, Industrial Arts, and Consumer and Homemaking Education
- Adult Vocational Education
- Handicapped and Disadvantaged Students
- Male-Female Status

Output Variables

- Graduate Follow-up

INPUT VARIABLES

Facilities — Secondary

Secondary vocational education programs in South Carolina are offered through a system consisting of 56 area vocational centers, 21 vocational wings, and 216 high schools located throughout the state. (For a description of the organization, governance, and locations of the area vocational centers and the vocational wings, see "State Context: Organization and Governance of Vocational Education.")

At the secondary level, there is no system for determining the actual usage rate of the vocational facilities. No up-to-date inventory of facilities by classrooms/labs by program is maintained at the state level for either high schools or centers.

Consequently, measures of room utilization and station occupancy, total state capacity by program, and facility quality cannot be made. This results in a lack of information at the state level in approving requests for new facilities and expansions. Due to the relatively complex system needed to inventory facilities and report usage, an analysis of benefits to costs would need to be undertaken before recommendation that a facilities utilization system be developed.

The existing state-level mechanism for ensuring that adequate equipment is provided for by each school for the programs offered consists of using state-approved equipment lists by program and of maintaining an inventory of all equipment costing $100 or more purchased with federal funds. After purchase, equipment quality is monitored by periodic on-site evaluations by state supervisors of the respective program areas.

In trying to obtain pertinent data on equipment, it was found that comparisons of dollar amounts of equipment by program by county were of little value due to escalating equipment costs over the last ten years. Schools purchasing equipment since 1975 seem to have an advantage in equipment value per student due to these higher costs.

In view of the doubts expressed by some LEA administrators as to the adequacy of the approved equipment lists and the methods used to monitor and inventory equipment after purchase, there appears to be a need to evaluate the effectiveness of this system.

Tables 15 and 16 list the county, date opened, square feet, cost, and number of laboratories and classrooms for each area vocational center and vocational wing. Similar data are shown for expansions and totals are provided for those facilities which have been expanded since originally constructed. Enrollments are shown for area vocational centers only.

TABLE 15

VOCATIONAL CENTERS AND EXPANSIONS

NO.	CENTER	COUNTY	1977–78 ENROLLMENT	DATE OF OPERATION	COST*	SQUARE FEET	NUMBER OF LABORATORIES	NUMBER OF CONFERENCE/ CLASSROOMS
1.	Aiken County Vocational Center	Aiken	338	1967	$ 615,566	36,000	9	3
2.	Allendale County Vocational Center	Allendale	516	1969	600,000	34,800	11	7
3.	Anderson County School Districts 1 & 2 Vocational Center	Anderson	484	1973	875,116	52,000	14	5
	1st Expansion			1977	675,040	19,865	5	3
					$1,550,156	71,865	19	8
4.	R.D. Anderson Area Vocational Center	Spartanburg	709	1969	750,000	49,174	10	8
	1st Expansion			1972	300,000	18,872	6	0
	2nd Expansion			1977	532,213	17,400	3	4
					$1,582,213	85,446	19	12
5.	Aynor-Conway Career Center	Horry	519	1976	1,011,191	92,250	18	7
6.	Barnwell County Area Vocational Center	Barnwell	327	1969	600,000	36,000	7	8
7.	Beaufort-Jasper Career Education Center	Beaufort	461	1977	1,600,000	49,589	14	4
	1st Expansion			1978	602,489	17,711	6	2
					$2,202,489	67,300	20	6
8.	Bonneau Vocational Center	Berkeley	371	1971	200,000	23,671	7	0
9.	Calhoun-Orangeburg Vocational Center	Orangeburg	403	1972	626,666	45,000	12	3
	1st Expansion			1978	766,666	30,000	9	5
					$1,393,332	75,000	21	8
10.	Career & Occupation Center	Florence	285	1972	600,000	36,479	8	5
11.	Cherokee Area Vocational Center	Cherokee	742	1968	$1,000,000	61,000	14	4
	1st Expansion			1971	Local Funds	23,000	2	1
	2nd Expansion			1975	340,000	21,000	5	0
	Paving			1975	20,868			
					$1,360,868	105,000	21	5
12.	Chester County Area Vocational Center	Chester	489	1968	600,000	44,249	11	5
	1st Expansion			1972	Local Funds	2,768	1	1
						47,017	12	6
13.	Clarendon County Area Vocational Center	Clarendon	359	1973	700,000	38,000	10	5
	1st Expansion			1979	266,666	8,800	2	[illegible]
					$ 966,666	46,800	12	[illegible]

NO.	CENTER	COUNTY	1977–78 ENROLLMENT	DATE OF OPERATION	COST*	SQUARE FEET	NUMBER OF LABORATORIES	NUMBER OF CONFERENCE/ CLASSROOMS
14.	Colleton County Area Vocational Center	Colleton	311	1969	$ 600,000	45,184	10	7
15.	Cooper River Occupational Center	Charleston	537	1973	626,666	25,140	11**	8**
	Existing Building				Local Funds	15,664		
						40,804		
16.	Cope Area Vocational Center	Orangeburg	294	1962	Local Funds			
	Replacement of Existing Bldg.			1978	870,728	38,525	8	7
17.	Crescent Cities Vocational Center	Aiken	115	1966	Local Funds	29,992	6	2
18.	Daniel Morgan Vocational Center	Spartanburg	500	1967	1,000,000	87,000	14	9
	1st Expansion			1977	653,433	20,000	5	6
					$1,653,433	107,000	19	15
19.	Darlington Career & Manpower Center	Darlington	440	1973	1,000,000	53,250	18	2
20.	Dillon County Area Vocational Center	Dillon	397	1970	600,000	43,000	11	4
21.	Donaldson Vocational Training Center	Greenville	605	1971	1,000,000	71,700	15	2
22.	Dorchester County Vocational Center	Dorchester	926	1974	1,200,000	55,000	16	8
23.	Eau Claire Career Center	Richland	1,238	1974	800,000	40,116	18	1
24.	Enoree Area Vocational Center	Greenville	513	1973	1,022,520	57,792	13	3
	1st Expansion			1976	Local Funds	1,368	1	3
						59,160	14	6
25.	Fairfield County Vocational Center	Fairfield	753	1969	628,000	40,404	13	6
	1st Expansion			1975	250,000	11,150	3	1
					$ 878,000	51,554	16	7
26.	Finklea Career Center	Horry	388	1970	142,000	68,000**	13**	2**
	1st Expansion & Renovation			1976	250,000			
					$ 392,000			
27.	Florence Area Vocational Center	Florence	1,094	1966	828,000	60,346	16	7
	1st Expansion			1977	400,000	33,062	7	3
					$1,228,000	93,408	23	10
28.	Floyd D. Johnson Vocational Center	York	920	1975	963,333	30,000	8	8
29.	Foothills Area Vocational Center	Greenville	560	1972	490,867	61,950	14	8
30.	Golden Strip Vocational Center (To open September, 1978)	Greenville		1978	1,899,162	69,168	16	6

NO.	CENTER	COUNTY	1977–78 ENROLLMENT	DATE OF OPERATION	COST*	SQUARE FEET	NUMBER OF LABORATORIES	NUMBER OF CONFERENCE/ CLASSROOMS
31.	Grand Strand Career Center	Horry	503	1973	$ 600,000	51,300	12	3
	1st Expansion			1974	Local Funds	7,866	3	1
						59,166	15	4
32.	Greenwood County Vocational Facilities	Greenwood	638	1968	500,000	30,015	8	3
	1st.Expansion			1975	613,000	27,500	7	4
					$1,113,000	57,515	15	7
33.	W. Gresham Meggett Educational Occupational Center	Charleston	520	1969	Local Funds	61,172	10	12
34.	Hartsville Area Vocational Center	Darlington	681	1967	365,955	22,865	8	5
	1st Expansion			1973	Local Funds	13,300	4	6
						36,165	12	11
35.	Hemingway Area Vocational Center	Williamsburg	126	1976	$ 600,000	22,600	6	5
36.	Irmo-Chapin Career Center	Lexington	1,088	1974	1,058,940	44,000	17	2
37.	Kershaw County Vocational Center	Kershaw	901	1968	500,000	36,000	8	5
	1st Expansion			1974	425,000	22,000	5	3
	2nd Expansion			1978	Local Funds	4,600	1	1
	Portable Units			1976	Local Funds			7
					925,000	62,600	14	16
38.	Lancaster Vocational Center	Lancaster	884	1965	540,532	34,540	5	7
	1st Expansion			1968	200,000	15,423	4	4
	2nd Expansion			1971	190,000	20,650	7	3
	3rd Expansion			1975	333,333	12,222	2	3
					$1,263,865	82,835	18	17
39.	Laurens County District 55 Vocational Center	Laurens	1,301	1972	600,000	45,000	6	11
40.	Lee County Vocational Center	Lee	294	1972	Local Funds	8,879	2	1
	1st Expansion			1976	771,334	31,628	9	2
						40,507	11	3
41.	Lexington 1 Area Vocational Center	Lexington	525	1974	1,443,105	72,000	17	6
42.	Lower Richland Career Center	Richland	280	1965	275,000	23,640	9	3
43.	Lynhaven Career Center	Richland	599	1974	1,500,000	57,166	14	7
44.	Marion–Mullins Vocational Center	Marion	703	1968	560,000	33,000	11	4
	1st Expansion			1971	Local Funds	32,000	8	0
	2nd Expansion			1977	500,000	20,000	5	4
					$1,060,000	85,000	24	8

NO.	CENTER	COUNTY	1977–78 ENROLLMENT	DATE OF OPERATION	COST*	SQUARE FEET	NUMBER OF LABORATORIES	NUMBER OF CONFERENCE/ CLASSROOMS
45.	Marlboro Area Vocational Center	Marlboro	752	1969	$ 600,000	45,500	15	2
	1st Expansion			1975	71,471	3,600	1	2
	2nd Expansion (Mobile Classrooms)			1976	Local Funds	576		2
					$ 671,471	49,676	16	6
46.	McDuffie Vocational High School							
	(Built in 1927)	Anderson	775	1963	Local Funds	37,500	8	12
	1st Expansion			1969	528,000	55,500	13	5
	2nd Expansion			1976	827,708	27,552	5	7
					$1,355,708	120,552	26	24
47.	Newberry County Vocational Center	Newberry	601	1977	1,200,000	47,820	12	6
48.	Oakley Vocational Center	Berkeley	397	1974	533,333	26,800	7	3
49.	Oconee Vocational Center	Oconee	586	1968	400,000	32,000	10	3
	1st Expansion			1975	550,000	38,500	8	9
					$ 950,000	70,500	18	12
50.	Pickens County Area Vocational Center	Pickens	625	1966	718,000	30,000	7	6
	1st Expansion			1969	300,000	24,000	7	4
	2nd Expansion			1976	510,000	28,000	6	3
					$1,528,000	82,000	20	13
51.	Rock Hill Career Development Center	York	1,001	1973	1,500,000	96,000	26	11
	1st Expansion			1976	535,860	24,000	9	2
					$2,035,860	120,000	35	13
52.	Sumter County Career Center	Sumter	423	1973	860,000	36,941	11	2
53.	H.B. Swofford Area Vocational Center	Spartanburg	466	1971	600,000	42,000	11	4
	1st Expansion			1976	475,200	21,000	4	1
					$1,075,200	63,000	15	5
54.	Strom Thurmond Vocational Center	Edgefield	683	1973	600,000	35,600	9	6
55.	Union County Vocational Center	Union	804	1966	200,000	***	***	***
	1st Expansion			1971	626,666	42,000	9	1
	2nd Expansion			1975	400,000	42,000	13	5
					$1,226,666	84,000	22	6
56.	Wilson Area Vocational Center	Richland	1,301	1969	600,000	43,939	14	4
	GRAND TOTALS		33,051		$52,725,627	3,245,633	813	396

*Total of federal, state, regional and local funds.
**Figures for entire building.
***Original building vacated in 1971

TABLE 16

HIGH SCHOOL VOCATIONAL WINGS

NO.	HIGH SCHOOL	DATE OF OPERATION	COST	SQUARE FEET	NUMBER OF LABORATORIES	NUMBER OF CONFERENCE/ CLASSROOMS
AIKEN COUNTY						
1.	Aiken High School	1975	$ 480,000	27,500	8	0
2.	North Augusta High School	1975	320,000	11,500	8	0
CHARLESTON COUNTY						
3.	Baptist Hill High School	1977	281,777	11,234	3	2
4.	Burke High School (New Construction)	1978	518,223	19,000	7	2
	Existing (Remodeled)			13,700	3	2
	TOTAL BURKE HIGH			32,700	10	4
CHESTERFIELD COUNTY						
5.	Central High School	1975	272,000	16,919	10	2
6.	Cheraw High School	1975	264,000	16,938	9	2
7.	Chesterfield High School	1975	144,000	15,152	6	0
8.	McBee High School	1975	120,000	6,200	2	1
FLORENCE COUNTY						
9.	Hannah-Pamplico High School	1976	600,000	25,236	8	2
GEORGETOWN COUNTY						
10.	Andrews High School	1976	174,760	6,828	2	1
11.	Howard High School	1976	225,240	9,167	2	1
HAMPTON COUNTY						
12.	Wade Hampton High School	1976	525,000	23,684	8	1

TABLE 16

HIGH SCHOOL VOCATIONAL WINGS

NO.	HIGH SCHOOL	DATE OF OPERATION	COST	SQUARE FEET	NUMBER OF LABORATORIES	NUMBER OF CONFERENCE/ CLASSROOMS
LANCASTER COUNTY						
13.	Andrew Jackson High School	1976	100,000	2,415	Information not available.	
LEXINGTON COUNTY						
14.	Airport High School	1975	400,000	25,081	3	3
15.	Batesburg-Leesville High School	1976	977,477	34,498	11	3
16.	Brookland-Cayce High School	1975	400,000	25,081	5	3
McCORMICK COUNTY						
17.	McCormick High School	1977	532,000	28,350	7	2
RICHLAND COUNTY						
18.	New Columbia High School (District 1)	1976	800,000		Information not available.	
19.	Richland Northeast High School (District 2)	1978	400,000	43,500	14	3
SPARTANBURG COUNTY						
20.	Charles Lea Center	1977	328,271	12,432	9	2
YORK COUNTY						
21.	Clover High School	1976	700,000	22,397	9	4
	GRAND TOTALS		$8,562,748	396,812	136	36

Facilities—Postsecondary

Postsecondary vocational education programs are offered through a system of 16 technical education institutions (TEC's) located throughout the state. (For a description of the organization, governance, and locations of the TEC's, see "State Context: Organization and Governance of Vocational Education in South Carolina.")

Table 17 lists the date opened, total cost, total gross and net square feet, and 1976-77 enrollment for each TEC.

Each year as part of the on-going budget cycle, TEC institutions identify their current and projected equipment deficiencies and incorporate those identified needs into their annual budget requests. These requests are then summarized and evaluated by the State TEC Board staff, and then transmitted to the General Assembly as a part of the TEC system's overall budget request.

As appropriations for TEC's equipment needs are made through the legislative process, TEC institutions procure necessary instructional equipment. Through a central computerized process, each item of equipment is given a unique inventory number and then stored on computer files along with relevant information about the particular piece of equipment. On a regular basis, equipment holdings of the TEC system are inventoried and evaluated to assure the availability of high quality, operational equipment for successful program maintenance. Through this equipment inventory and control process, the State TEC Board can remain accountable for all equipment, and at the same time monitor equipment needs throughout the system.

Unfortunately, inadequate funding in recent years has resulted in much of TEC's equipment falling behind the rapid technological advancement of industry. In 1977 alone, almost $1.5 million in identified equipment needs went unmet because of budgetary constraints.

TABLE 17

S. C. STATE BOARD FOR TECHNICAL & COMPREHENSIVE EDUCATION FACILITIES--JUNE 1977

Institution	Date Opened	Total Facility Costs	Total Gross Square Feet	Total Net Assignable Square Feet	1976-77 Enrollment
Aiken	1973	$ 1,592,427	69,640	45,807	1,253
Beaufort	1969	2,697,620	169,674	126,889	1,475
Chesterfield-Marlboro	1968	3,093,333	85,094	66,601	919
Denmark	1969	2,384,049	200,494	131,261	1,125
Florence-Darlington	1964	4,202,940	196,058	133,909	2,694
Greenville	1962	7,706,612	398,082	276,715	11,547
Horry-Georgetown	1966	1,470,000	82,569	51,351	1,683
Midlands	1963	7,350,052	420,795	327,775	7,494
Orangeburg-Calhoun	1968	3,296,945	108,032	95,177	2,368
Piedmont	1966	2,522,078	127,793	86,671	2,239
Spartanburg	1963	2,978,918	165,150	119,282	2,322
Sumter	1963	2,182,108	145,301	101,612	1,729
Tri-County	1963	3,243,600	158,095	123,194	3,569
Trident	1964	2,109,034	183,034	143,727	8,401
Williamsburg	1971	1,609,126	93,068	75,360	856
York	1964	2,741,922	142,658	108,988	1,776
TOTAL		$51,186,764	2,745,537	2,014,319	51,450*

*Excludes students listed as "Career Development" or "Undetermined."

Program Availability

Tables 18 and 19 show the number of secondary vocational courses and postsecondary technical programs offered to students of individual counties. In the case of postsecondary programs, those offered by an individual TEC are shown as available in the county or counties usually considered as the service area of that TEC.

This is an easy method of summarizing program availability but does not illustrate the greater number of programs available to those secondary students who attend vocational centers located across county lines from their parent high schools. Nor does it indicate the number of options available to postsecondary students who could conveniently attend either of two, or even three, TEC's, regardless of their county of residence.

TABLE 18

AVAILABLE SECONDARY COURSES BY PROGRAM AREA

COUNTY	AGRICULTURE	DISTRIBUTIVE EDUCATION	SECONDARY	POSTSECONDARY	CONSUMER & HOMEMAKING	OCCUPATIONAL HOME ECONOMICS	OFFICE OCCUPATIONS	TRADE & INDUSTRIES	INDUSTRIAL ARTS	PREVOCATIONAL	COUNTY TOTAL
Abbeville	5	–	–	–	9	–	1	8	–	1	24
Aiken	6	2	1	1	12	2	3	25	4	2	58
Allendale	3	–	–	–	6	–	2	18	1	1	31
Anderson	9	3	1	3	12	2	3	33	5	3	74
Bamberg	3	2	–	–	3	1	1	8	1	3	22
Barnwell	5	2	1	–	9	–	3	9	1	2	32
Beaufort	2	2	1	–	11	4	3	13	2	2	40
Berkeley	8	2	1	–	14	3	3	18	–	3	52
Calhoun	5	–	–	–	13	1	2	–	–	2	23
Charleston	5	2	3	–	15	5	4	36	4	3	77
Cherokee	4	2	1	1	7	4	3	29	4	1	56
Chester	2	2	2	1	9	–	2	18	–	2	38
Chesterfield	7	2	–	–	11	–	4	17	–	1	42
Clarendon	6	2	–	–	9	1	2	13	–	2	35
Colleton	8	2	–	–	8	2	2	12	3	2	39
Darlington	9	2	–	1	9	1	3	26	3	2	56
Dillon	6	2	2	–	8	2	3	16	–	2	41
Dorchester	4	2	–	–	11	2	4	21	–	2	46
Edgefield	5	2	–	–	7	–	2	8	3	2	29
Fairfield	4	1	1	–	5	1	3	21	–	1	37
Florence	9	2	2	1	11	2	3	29	4	2	65
Georgetown	5	3	–	–	7	2	3	20	1	3	44
Greenville	8	2	2	–	14	3	3	35	4	3	74
Greenwood	4	2	1	2	8	–	3	18	2	2	42
Hampton	7	2	–	–	6	–	2	10	–	2	29
Horry	15	3	3	1	12	3	3	23	2	2	67
Jasper	–	–	–	–	9	–	1	1	1	2	14
Kershaw	6	2	1	1	8	4	3	23	–	2	50
Lancaster	7	–	–	1	9	–	5	28	1	2	53
Laurens	4	2	–	1	7	–	3	16	1	1	35
Lee	4	2	–	–	10	–	3	10	–	2	31
Lexington	9	3	1	2	13	–	3	28	4	2	65
McCormick	3	–	–	–	6	–	1	7	1	1	19
Marion	12	2	1	1	11	1	3	19	1	1	52
Marlboro	6	2	3	1	9	–	4	16	1	2	44
Newberry	2	1	1	–	11	–	2	20	–	2	39
Oconee	8	2	1	1	13	2	3	28	1	2	61
Orangeburg	7	3	–	–	12	3	4	22	3	2	56
Pickens	7	–	2	1	12	1	3	30	2	2	60
Richland	–	3	3	1	13	4	5	31	4	2	66

COUNTY	AGRICULTURE	DISTRIBUTIVE EDUCATION	SECONDARY	POSTSECONDARY	CONSUMER & HOMEMAKING	OCCUPATIONAL HOME ECONOMICS	OFFICE OCCUPATIONS	TRADE & INDUSTRIES	INDUSTRIAL ARTS	PREVOCATIONAL	COUNTY TOTAL
Saluda	4	–	–	–	5	1	2	3	4	3	22
Spartanburg	10	2	3	2	12	1	4	34	4	2	74
Sumter	8	2	–	1	11	4	4	16	4	2	52
Union	1	1	2	–	7	3	2	16	–	2	34
Williamsburg	7	–	–	–	14	–	3	12	1	1	38
York	6	3	1	1	9	4	5	32	–	3	64
Special Institutions	1	–	2	–	6	1	1	15	1	1	28
STATE TOTAL	266	78	43	25	453	70	134	891	78	92	2,130

Faculty and Staff—Secondary

The following tables represent information on secondary vocational faculty and staff as reported to the Office of Vocational Education for 1977-78. Table 20 represents, by county, the number of professional staff members reported, by position (full-time and part-time). Table 21 represents the number of faculty members reported (FTE's) by county by program area, and Table 22 shows the ratio of students to teachers, based on the figures from Table 21 and the secondary vocational enrollments for 1977-78.

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TABLE 19

AVAILABLE POSTSECONDARY PROGRAMS BY AREA OF STUDY

TEC	AGRICULTURAL TECHNOLOGY	ARTS & SCIENCES	BUSINESS TECHNOLOGY	ENGINEERING	HEALTH SCIENCE	INDUSTRIAL	PUBLIC SERVICE	TOTAL	COUNTIES SERVED:
Aiken	0	0	6	5	0	11	0	22	Aiken
Beaufort	0	0	6	1	1	13	1	22	Beaufort, Colleton, Hampton, Jasper
Chesterfield-Marlboro	1	2	5	2	1	13	0	24	Chesterfield, Marlboro
Denmark	0	0	2	4	0	18	0	24	Allendale, Bamberg, Barnwell
Florence-Darlington	1	0	9	6	6	12	2	36	Darlington, Dillon, Florence, Marion
Greenville	0	2	12	8	12	21	1	56	Greenville
Horry-Georgetown	3	0	6	2	1	11	1	24	Georgetown, Horry
Midlands	2	2	13	10	7	21	3	58	Fairfield, Lexington, Richland
Orangeburg-Calhoun	1	0	7	4	4	13	1	30	Calhoun, Orangeburg
Piedmont	0	0	7	4	5	15	2	33	Abbeville, Edgefield, Greenwood, Laurens, McCormick, Newberry, Saluda
Spartanburg	1	0	11	5	5	16	1	39	Cherokee, Spartanburg, Union
Sumter	2	0	6	3	1	11	1	24	Clarendon, Kershaw, Lee, Sumter
Tri-County	4	2	6	7	2	13	2	36	Anderson, Oconee, Pickens
Trident	1	2	11	10	10	14	2	50	Berkeley, Charleston, Dorchester
Williamsburg	0	0	3	2	0	15	0	20	Williamsburg
York	0	2	8	6	4	11	0	31	Chester, Lancaster, York
TOTAL	16	12	118	79	59	228	17	529*	

*Includes 309 associate degrees and 220 diploma programs.

TABLE 20

SECONDARY VOCATIONAL ADMINISTRATIVE STAFF

POSITION

County	Director		Assistant Director		Guidance Counselor		Job Placement Coordinator		Adult Program Coordinator		Other Administrator	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
Abbeville	–	–	–	–	–	–	–	–	–	–	–	–
Aiken	2	–	–	–	1	–	–	–	–	–	–	–
Allendale	1	–	–	–	–	–	–	–	–	–	–	–
Anderson	1	–	–	–	1	1	–	–	–	–	–	–
Bamberg	–	–	–	–	–	–	–	–	–	–	–	–
Barnwell	1	–	–	–	1	–	–	–	–	–	–	–
Beaufort	–	–	–	–	–	–	–	–	–	–	–	–
Berkeley	2	–	–	–	1	–	–	–	–	–	–	–
Calhoun	–	–	–	–	–	–	–	1	–	–	–	–
Charleston	2	–	–	2	2	–	–	–	–	–	–	–
Cherokee	1	–	1	–	1	–	–	–	–	–	–	–
Chester	1	–	–	–	1	–	–	–	–	–	–	–
Clarendon	1	–	–	–	–	1	–	–	–	–	–	–
Colleton	1	–	–	–	1	–	–	–	–	–	–	–
Darlington	2	–	–	–	2	–	–	–	–	–	–	–
Dillon	1	–	1	–	1	–	–	–	–	–	–	–
Dorchester	1	–	1	–	1	–	–	–	–	–	–	–
Edgefield	–	–	–	–	–	–	–	–	–	–	–	–
Fairfield	–	–	–	–	1	–	–	–	–	–	–	–
Florence	2	–	–	–	2	–	–	–	–	–	–	–
Georgetown	–	–	–	–	–	–	–	–	–	–	–	–
Greenville	3	–	–	–	3	–	3	–	–	–	–	–
Greenwood	1	–	–	–	1	–	1	–	–	–	–	–
Horry	3	–	–	1	2	2	–	1	–	–	–	–
Jasper	–	–	–	–	–	–	–	–	–	–	–	–
Kershaw	1	–	1	–	1	–	1	–	1	–	–	–
Lancaster	1	–	1	–	1	–	1	–	1	–	–	–
Laurens	–	–	–	–	–	–	–	–	–	–	–	–
Lee	1	–	–	–	1	–	–	–	–	–	–	–
Lexington	2	–	1	–	1	–	–	–	–	–	–	–
McCormick	–	–	–	–	–	–	–	–	–	–	–	–
Marion	1	–	–	–	1	–	–	–	–	–	1	–
Marlboro	–	–	–	–	1	–	1	–	–	–	–	–
Newberry	–	–	–	–	–	–	–	–	–	–	–	–
Oconee	1	–	1	–	1	–	1	–	1	–	–	–
Orangeburg	2	–	1	–	2	–	–	–	–	–	–	–
Pickens	1	–	–	–	1	–	1	–	–	–	–	–
Richland	3	–	1	–	3	–	–	–	–	–	–	–
Saluda	–	–	–	–	–	–	–	–	–	–	–	–
Spartanburg	3	–	1	–	3	–	3	–	–	–	1	–
Sumter	1	–	–	–	1	–	–	1	–	–	–	1
Union	1	–	–	–	1	–	–	–	–	–	–	–
Williamsburg	–	–	–	–	–	–	–	–	–	–	–	–
York	2	–	1	–	1	–	–	1	–	1	–	–
TOTAL	46	–	11	3	41	4	12	4	3	1	2	1

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TABLE 21

SECONDARY VOCATIONAL FACULTY (FTE's)

COUNTY	AGRICULTURE	DISTRIBUTIVE EDUCATION	HEALTH OCCUPATIONS	CONSUMER & HOMEMAKING	OCCUPATIONAL HOME ECONOMICS	OFFICE OCCUPATIONS	TRADE & INDUSTRIES	PREVOCATIONAL	TOTAL
Abbeville	2.4	–	–	4.3	–	5.2	3.5	1.6	17.0
Aiken	4.2	2.6	2.0	4.2	1.0	17.2	31.0	8.2	80.4
Allendale	0.8	–	–	2.0	–	3.0	6.9	1.2	13.9
Anderson	8.1	5.8	–	13.8	–	16.8	19.4	9.7	73.6
Bamberg	0.6	1.8	–	1.7	–	3.2	9.0	2.0	18.3
Barnwell	2.6	1.0	1.0	5.0	–	5.0	6.0	5.2	25.8
Beaufort	0.8	1.8	–	6.4	2.0	7.6	11.2	3.1	32.9
Berkeley	3.6	2.7	0.4	12.5	0.8	16.1	18.0	5.9	60.0
Calhoun	2.2	–	–	3.0	–	2.0	–	0.8	8.0
Charleston	2.4	8.3	3.0	30.0	1.6	46.7	43.8	10.2	146.0
Cherokee	1.8	1.0	1.0	4.0	2.0	7.0	16.2	1.7	34.7
Chester	1.0	1.2	1.0	4.0	–	8.4	12.0	3.6	31.2
Chesterfield	3.9	1.4	–	6.2	–	9.8	7.8	1.2	30.3
Clarendon	4.7	0.6	–	4.8	1.0	3.0	7.0	5.0	26.1
Colleton	1.2	0.8	0.2	4.8	1.0	2.4	6.4	–	16.8
Darlington	5.7	1.6	–	7.7	0.4	9.2	19.8	3.5	47.9
Dillon	3.6	1.8	1.0	5.5	1.0	4.4	8.0	2.2	27.5
Dorchester	2.9	0.7	–	6.3	1.0	10.4	11.0	1.5	33.8
Edgefield	1.0	0.6	–	3.0	–	3.3	5.6	2.0	15.5
Fairfield	1.9	2.0	1.0	2.3	1.0	2.8	11.0	3.6	25.6
Florence	9.6	5.4	1.1	14.2	2.5	19.7	22.9	10.3	85.7
Georgetown	2.2	–	–	5.7	1.0	5.5	11.6	4.4	30.4
Greenville	8.3	3.4	3.0	19.7	3.2	29.9	37.8	10.0	115.3
Greenwood	1.8	1.0	0.3	6.7	1.0	4.9	6.6	3.3	25.6
Hampton	2.1	1.1	–	3.0	–	3.8	5.0	1.3	16.3
Horry	9.4	2.4	3.2	9.3	1.0	11.3	22.6	8.2	67.4
Jasper	–	0.2	–	2.1	1.0	3.0	3.0	3.2	12.5
Kershaw	2.3	0.6	1.0	5.9	2.0	10.3	15.2	3.8	41.1
Lancaster	3.0	–	–	4.5	–	10.6	18.1	2.8	38.6
Laurens	1.3	1.6	–	4.4	–	5.3	9.8	2.6	25.0

TABLE 21

SECONDARY VOCATIONAL FACULTY (FTE's)

COUNTY	AGRICULTURE	DISTRIBUTIVE EDUCATION	HEALTH OCCUPATIONS	CONSUMER & HOMEMAKING	OCCUPATIONAL HOME ECONOMICS	OFFICE OCCUPATIONS	TRADE & INDUSTRIES	PREVOCATIONAL	TOTAL
Lee	2.6	0.6	–	4.3	–	3.0	5.0	1.6	17.1
Lexington	4.8	4.0	1.0	11.4	–	28.3	36.1	9.2	94.8
McCormick	1.0	–	–	2.0	–	2.0	4.0	1.0	10.0
Marion	6.6	1.0	1.0	6.7	–	4.3	12.8	0.8	33.2
Marlboro	3.5	1.0	1.3	5.5	0.2	5.5	11.8	5.7	34.5
Newberry	1.6	0.6	–	3.8	–	4.6	6.1	4.8	21.5
Oconee	5.4	2.8	1.0	9.1	1.0	10.6	15.4	5.2	50.5
Orangeburg	5.6	3.1	–	14.6	1.8	14.7	28.5	9.2	77.5
Pickens	2.6	–	1.0	6.8	1.0	8.6	16.0	4.8	40.8
Richland	–	8.3	4.4	21.6	6.8	33.6	36.6	22.0	133.3
Saluda	1.6	–	–	1.2	0.8	3.2	2.0	1.4	10.2
Spartanburg	10.0	2.0	4.2	19.4	2.6	14.0	43.8	13.7	109.7
Sumter	5.8	2.1	–	11.9	2.2	9.4	8.8	7.9	48.1
Union	1.0	0.5	1.0	4.4	1.4	5.7	11.0	3.0	28.0
Williamsburg	4.6	–	–	9.3	–	7.2	–	6.2	27.3
York	4.2	3.8	1.0	8.4	2.8	11.9	23.0	2.7	57.8
TOTAL	157.7	81.2	35.4	360.5	45.9	455.7	687.1	222.3	2,045.8

TABLE 22

STUDENT-TEACHER RATIO (STUDENTS PER TEACHER)

COUNTY	AGRICULTURE	DISTRIBUTIVE EDUCATION	HEALTH OCCUPATIONS	CONSUMER & HOMEMAKING	OCCUPATIONAL HOME ECONOMICS	OFFICE OCCUPATIONS	TRADE & INDUSTRIES	PREVOCATIONAL	AVERAGE
Abbeville	80	–	–	72	–	49	23	79	57
Aiken	90	82	52	318	59	65	32	110	64
Allendale	61	–	–	102	–	48	38	84	55
Anderson	63	93	–	116	–	75	35	101	76
Bamberg	105	57	–	102	–	29	27	116	50
Barnwell	60	36	30	92	–	45	33	73	58
Beaufort	100	46	–	106	35	99	29	82	68
Berkeley	83	82	78	108	34	65	47	120	76
Calhoun	77	–	–	86	–	11	–	100	66
Charleston	56	63	59	100	49	72	47	93	70
Cherokee	89	71	30	73	26	62	27	66	46
Chester	32	13	22	113	–	62	27	95	55
Chesterfield	96	111	–	100	–	49	51	113	71
Clarendon	81	53	–	100	38	41	37	72	64
Colleton	76	134	130	106	26	27	90	–	83
Darlington	81	89	–	107	90	62	41	81	65
Dillon	70	44	27	73	29	53	30	103	54
Dorchester	96	41	–	107	46	69	51	88	71
Edgefield	122	72	–	87	–	47	53	67	65
Fairfield	89	22	49	117	60	76	43	45	57
Florence	64	62	68	100	54	48	50	103	67
Georgetown	104	–	–	93	41	79	63	94	78
Greenville	134	51	36	13	65	95	50	106	86
Greenwood	82	58	133	92	35	44	49	88	67
Hampton	71	84	–	95	–	67	32	115	67
Horry	55	56	26	104	85	32	30	96	54
Jasper	–	105	–	114	27	38	20	67	54
Kershaw	84	52	24	81	48	57	56	66	61
Lancaster	77	–	–	92	–	77	49	74	66
Laurens	117	98	–	105	–	79	49	113	78
Lee	83	40	–	106	–	25	31	123	66
Lexington	57	77	37	127	–	70	48	105	71
McCormick	64	–	–	100	–	73	40	86	66
Marion	71	56	24	81	–	37	42	64	55
Marlboro	75	34	46	93	55	31	50	74	60
Newberry	53	113	–	132	–	85	69	108	92
Oconee	77	40	25	98	26	75	32	77	63
Orangeburg	94	42	–	106	61	61	56	82	72
Pickens	81	–	34	104	35	80	33	100	66
Richland	–	66	38	110	48	70	45	116	75
Saluda	87	–	–	98	48	70	42	81	70
Spartanburg	89	78	36	106	48	125	34	88	71
Sumter	73	81	–	103	55	61	42	141	83
Union	44	88	25	94	50	40	39	110	56
Williamsburg	68	–	–	87	–	46	–	75	79
York	80	49	30	100	48	65	34	100	58
RANGE	32-134	13-134	22-133	13-318	26-90	11-125	20-90	45-141	46-92

Enrollments—Secondary

Total secondary enrollment in South Carolina in 1977-78 was 146,957. Table 23 breaks this total down by program area by county.

TABLE 23

SECONDARY VOCATIONAL ENROLLMENTS, 1977-78

COUNTY	AGRICULTURE	DISTRIBUTIVE EDUCATION	HEALTH OCCUPATIONS	CONSUMER & HOMEMAKING	OCCUPATIONAL HOME ECONOMICS	OFFICE OCCUPATIONS	TRADE & INDUSTRIES	INDUSTRIAL ARTS	PREVOCATIONAL	TOTAL*
Abbeville	250			435		330	103		68	1,186
Aiken	410	207	57	1,439	62	1,152	1,069	465	905	5,766
Allendale	46			259		132	453	109	98	1,078
Anderson	630	535	26	1,503	88	1,366	726	450	782	6,106
Bamberg	64	85		176	13	70	242	22	214	920
Barnwell	158	85	31	428		240	201	22	156	1,321
Beaufort	100	72	32	562	88	717	345	103	357	2,245
Berkeley	281	212	27	1,432	116	921	1,104		639	4,705
Calhoun	223			314	48	34			61	780
Charleston	95	530	135	2,956	247	3,690	1,788	555	1,369	11,365
Cherokee	169	66	31	231	58	357	548	219	115	1,794
Chester	36	107	35	408		503	383		409	1,881
Chesterfield	295	131		571		661	355		218	2,231
Clarendon	401	35		552	36	138	238		260	1,660
Colleton	317	95		617	34	68	188	88	248	1,655
Darlington	630	152		808	82	423	823	147	276	3,341
Dillon	250	90	29	474	35	289	254		295	1,717
Dorchester	142	41		583	52	864	745		166	2,613
Edgefield	115	54		278		113	166	90	225	1,041
Fairfield	161	65	51	295	80	212	644		226	1,734
Florence	829	341	71	1,296	77	878	1,218	265	783	5,758
Georgetown	204	43		501	42	368	549	22	573	2,302
Greenville	1,110	188	105	2,502	172	2,786	1,667	737	1,442	10,709
Greenwood	125	57	27	546		322	377	162	398	2,014
Hampton	138	99		196		222	157		124	955
Horry	583	121	82	943	54	413	778	55	742	3,771
Jasper				218		270	23	50	85	777
Kershaw	188	52	19	379	106	615	929		240	2,528
Lancaster	210			531		760	893	69	330	2,793
Laurens	227	217		543		346	472	49	327	2,181
Lee	132	23		453		86	211		165	1,070
Lexington	333	435	29	1,411	17	2,160	1,513	318	966	7,182
McCormick	42			196		211	190	11	76	726
Marion	432	49	29	541	45	107	500	121	229	2,053
Marlboro	171	41	51	615		145	405	15	453	1,896
Newberry	45	39	57	506		279	462		269	1,657
Oconee	435	98	27	839	37	752	475	104	259	3,026
Orangeburg	483	165		1,692	129	766	1,612	98	383	5,193
Pickens	194		34	704	18	582	531	235	244	2,542
Richland		537	176	2,322	421	2,420	1,444	1,151	2,180	10,651
Saluda	91			184	37	20	92	31	132	587
Spartanburg	698	142	141	1,985	82	1,752	1,434	1,123	1,457	8,814
Sumter	457	259		1,191	113	610	306	492	562	3,990
Union	61	19	75	421	80	236	457		380	1,729
Williamsburg	370	12		690		476	172	18	300	2,038
York	310	169	16	778	142	859	782		648	3,704
Special Institutions	44		6	79	65	22	932	3	14	1,165
TOTAL	12,685	5,668	1,399	36,583	2,676	30,743	28,956	7,399	20,848	146,957

*This figure may not equal total of program area enrollments for all counties, due to students crossing county lines to attend vocational education centers.

Enrollments—Postsecondary

Table 24 shows postsecondary curriculum enrollments in South Carolina by area of study by TEC.

TABLE 24

POSTSECONDARY ENROLLMENTS 1976-77

TEC INSTITUTIONS	AGRICULTURAL TECHNOLOGY	ARTS & SCIENCES	BUSINESS TECHNOLOGY	ENGINEERING	HEALTH SCIENCE	INDUSTRIAL	PUBLIC SERVICE	TOTAL
Aiken			653	165		435		1,253
Beaufort			671		35	712	57	1,475
Chesterfield-Marlboro		159	228	21		511		919
Denmark			116	90		919		1,125
Florence-Darlington	88		979	371	317	637	302	2,694
Greenville		2,215	4,176	1,159	1,455	2,002	540	11,547
Horry-Georgetown	219		790	70		373	231	1,683
Midlands	104	691	3,401	750	371	1,410	767	7,494
Orangeburg-Calhoun	111		899	205	143	821	189	2,368
Piedmont			576	237	136	864	426	2,239
Spartanburg	66		893	225	180	922	36	2,322
Sumter	47		888	84		613	97	1,729
Tri-County	72	544	846	467	95	1,039	506	3,569
Trident	166	1,004	3,103	1,131	610	1,317	1,070	8,401
Williamsburg			172	4		680		856
York		300	613	264	70	529		1,776
TOTAL	873	4,913	19,004	5,243	3,412	13,784	4,221	51,450*

*Does not include 2,315 students listed as "Career Development" or "Undetermined."

Continuing Education

Enrollment in TEC's Continuing Education Program has continued to climb over the last several years as South Carolinians have increasingly availed themselves of skill upgrading opportunities. Offered primarily during the evening for students on a part-time basis, the TEC System's Continuing Education Program is designed to provide training for students interested in upgrading or updating their current job skills. Through the Continuing Education Program, TEC provides the skilled manpower essential to the continued economic development of South Carolina.

Table 25 shows, by TEC, statewide Continuing Education enrollments for 1976-77 and for 1977-78.

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TABLE 25

S. C. STATE BOARD FOR TECHNICAL AND COMPREHENSIVE EDUCATION
CONTINUING EDUCATION PROGRAM ENROLLMENTS
ACTUAL 1976-1977 AND TENTATIVE 1977-78

TEC Institution	FY 1977 Enrollment	FY 1978 Enrollment
Aiken	1,228	1,824
Beaufort	206	440
Chesterfield/Marlboro	1,355	2,021
Denmark	18	4
Florence/Darlington	3,527	4,607
Greenville	3,245	6,423
Horry/Georgetown	1,006	1,454
Midlands	6,110	5,912
Orangeburg/Calhoun	3,298	4,511
Piedmont	5,232	5,658
Spartanburg	2,713	3,974
Sumter	2,622	3,855
Tri-County	6,606	7,801
Trident	6,922	6,438
Williamsburg	495	513
York	1,691	2,269
S. C. Fire Academy	405	3,243
TOTAL	46,679	60,947

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AN OVERVIEW: 1976-77

Purposes and Goals. Each year for four consecutive years, the South Carolina Department of Education has made available an extensive set of career planning experiences to juniors attending its public high schools. The program involves use of the ACT Career Planning Program, a guidance-oriented career exploration assessment instrument to help participating students learn about themselves (their interests, career-related experiences, and abilities), and to help the students relate these characteristics to career and educational opportunities in the world of work. Through inservice training activities and counseling resource materials provided by the State Department of Education, in combination with the efforts of guidance counselors and educators throughout the state, the program focuses on the goal of facilitating increased self and career awareness and exploration by all South Carolina juniors, thereby equipping them to make better informed, more satisfying career and educational decisi[illegible]

Participation Summary. During the 1976-77 school year, a total of 213 high schools participated in the program, representing 97% of the 220 eligible public high schools in the state. These schools involved a total of 34,869 juniors in the career exploration experiences and of this total 49.4% were males and 50.6% were females. Approximately 50% of the participating students identified themselves as Caucasian Americans and 33% as Afro-Americans. Ten percent did not respond to this item and the remaining 7% were composed of American Indians, Oriental Americans, or those of "other" racial or ethnic backgrounds.

CHARACTERISTICS, PLANS, AND NEEDS OF SOUTH CAROLINA HIGH SCHOOL JUNIORS

The information discussed in this section provides a statewide perspective on the characteristics (abilities, interests, and experiences), the plans (educational and occupational), and the needs (financial aid, study skills, math skills, etc.) of the 1976-77 South Carolina junior class as a whole.

The information summarized in the following tables was drawn from selected tables of the 1976-77 South Carolina Composite Secondary School Career Planning Report prepared for the State Department of Education. The results are based on the responses of virtually all of 34,790 students tested in the participating high schools.

Ability Measures and High School Grades. To help students learn about their own level of development in specific skill areas, six ability areas are measured by scales of the CPP. In each area, the student's scores are compared with those of other students in a national norm group, assisting the student in identifying individual strengths and weaknesses.

The individual's results are reported on the student report using a Career Cluster system to help the student relate his or her abilities to groups of occupations where these abilities are often important.

The following six ability areas are measured by the CPP:

> **Mechanical Reasoning**. This scale is designed to assess familiarity with and understanding of the way mechanical and nonmechanical objects function. This ability is especially relevant to trade, technical, and engineering programs.
>
> **Numerical Skills.** This scale is designed to assess basic arithmetic skills ranging from simple computations to the application of mathematical principles. Both word problems and simple numerical problems are included because the scale is designed to assess mathematical reasoning skills rather than previous coursework. No coursework beyond elementary algebra is assumed. This scale is particularly useful in identifying students needing remediation in mathematics.

Space Relations. The scale is designed to assess the ability to visualize 3-dimensional objects from 2-dimensional object representations. This ability is important in art and certain technical fields such as drafting and surveying.

Reading Skills. This scale is designed to assess the ability to read and understand factual material and more subtle aspects of comprehension. Results may be helpful in identifying students who need further reading skill development. Reading is an important skill for almost all curriculums and for most occupations.

Language Usage. This scale is designed to assess recognition of inappropriate use of the English language, such as errors in punctuation, capitalization, grammar and sentence structure. This test is helpful in identifying students who need remediation in basic English skills.

Clerical Skills. This scale is designed to assess perceptual speed and accuracy and the ability to follow directions in performing clerical tasks.

Table 26 presents the ability measure stanine averages for 1976-77 students in the State of South Carolina, summarizing the information for males and females separately, and for the total group combined. The scores are reported in the form of stanine scores which range from a low of 1 to a high of 9. Within this system, the average national CPP norm group score for the total group of males and females combined is 5.0 for each of the ability scales.

TABLE 26: ABILITY MEASURE AVERAGES OF STUDENTS (IN STANINES)

ABILITY MEASURE		MALE	FEMALE	TOTAL
Mechanical	Mean	5.01	3.78	4.38
Reasoning	S.D.	2.06	1.62	1.95
Numerical	Mean	4.65	4.61	4.63
Skills	S.D.	2.31	2.15	2.23
Space	Mean	4.80	4.30	4.54
Relations	S.D.	2.17	1.79	2.00
Reading	Mean	4.10	4.44	4.27
Skills	S.D.	2.70	2.60	2.66
Language	Mean	4.56	5.35	4.96
Usage	S.D.	2.26	2.30	2.31
Clerical	Mean	4.33	4.93	4.64
Skills	S.D.	2.32	2.27	2.32
Estimated ACT	Mean	17.19	17.37	17.28
Composite	S.D.	5.36	5.00	5.18

The 1976-77 students' scores on the Language Usage scale were at the national norm group average, while their scores were approximately one-fourth of a standard deviation below the national CPP norm group on the Numerical Skills, Space Relations, and Clerical Skills scales, and one-third of a standard deviation below the norm group in the areas of Mechanical Reasoning and Reading Skills.

Comparisons of the scores for males and females indicate the groups were very nearly equal in their Numerical Skills score, with males scoring higher than females on the Mechanical Reasoning and Space Relations scales, and females scoring higher on the Reading Skills, Language Usage and Clerical Skills scales.

The final lines of entry in Table 26 report the estimated ACT Composite Score for the South Carolina juniors. The score is based on the student's performance on the Numerical Skills and Reading Skills measures of the CPP and is an estimate of what the student's Composite score would have been if he or she had completed the ACT Assessment. The estimated ACT Composite for the total group of South Carolina juniors is 17.3, only one-tenth of a score point lower than the average score of 18.3 for the national group of approximately one million college-bound students taking the ACT Assessment in 1975-76.

In Table 27, the average high school grades reported by students completing the CPP are summarized. In reviewing the results for males and females, it is clear that females received higher grades in all five of the grading categories, with the largest grade difference occurring in the English area.

TABLE 27: AVERAGE HIGH SCHOOL GRADES OF STUDENTS

COURSE AREA		MALE	FEMALE	TOTAL
English	Mean	2.14	2.54	2.34
	S.D.	1.02	.97	1.02
Math	Mean	2.30	2.42	2.36
	S.D.	1.06	1.04	1.05
Social Science	Mean	2.30	2.54	2.42
	S.D.	1.12	1.08	1.10
Natural Science	Mean	2.34	2.54	2.44
	S.D.	.99	.95	.98
Business/ Vocational	Mean	2.75	2.98	2.83
	S.D.	.93	.91	.93

Educational and Occupational Plans. The information summarized in Table 28 describes the highest level of education planned by the 1976-77 juniors of South Carolina. A total of 38% were planning to go on to four years of college or more, with another 38% planning a postsecondary program of up to two years in length. Approximately 6% of the students were interested in an occasional course after high school, while 16% planned to discontinue their formal education after receiving their high school diploma. It is perhaps significant to note that more females (78%) had goals involving postsecondary educational programs than do males (73%).

TABLE 28: HIGHEST LEVEL OF EDUCATION PLANNED BY STUDENTS (IN PERCENTAGES)

EDUCATION PLANNED	MALE	FEMALE	TOTAL
High School Diploma	18	14	16
Occasional Course Beyond HS	6	5	6
Voc., Business or Tech Program (two years or less)	23	20	22
Two-Year College Degree	13	19	16
Four-Year College Degree	24	28	26
One or More Yrs. of Grad. Study	13	11	12
Not Given	3	2	2

When asked to identify their educational program and occupational choice perferences, students of South Carolina provided the information summarized in Table 29. Males most frequently identified their first choice educational program as being in the Trades, Crafts, and Industries cluster (38%) and the Technologies cluster (15%), while females more often identified programs in the Social and Personal Services (22%) and the Health Services/Sciences cluster (20%). Sex-related patterns of choice showed only minor changes in comparison to the previous year.

TABLE 29: EDUCATIONAL PROGRAM AND OCCUPATIONAL CHOICES OF STUDENTS BY CAREER CLUSTERS (IN PERCENTAGES)

CLUSTER	FIRST EDUCATIONAL PROGRAM CHOICE MALE	FIRST EDUCATIONAL PROGRAM CHOICE FEMALE	FIRST EDUCATIONAL PROGRAM CHOICE TOTAL	OCCUPATIONAL CHOICE MALE	OCCUPATIONAL CHOICE FEMALE	OCCUPATIONAL CHOICE TOTAL
Social and Personal Services	8	22	16	12	26	20
Business Sales and Management	9	6	7	7	5	6
Business Operations	3	17	11	3	17	10
Trades, Crafts, and Industries	38	7	22	38	7	22
Technologies	15	2	9	14	2	8
Natural and Social Sciences	8	8	8	6	5	6
Health Services/Sciences	5	20	13	5	19	12
Creative and Applied Arts	9	13	11	8	10	10
Undecided	4	4	4	7	8	7

Special Educational Needs. When asked what special educational needs they had, the 1976-77 juniors in South Carolina responded as shown in Table 30. The information in the table summarizes the responses of both males and females and identifies the percentage of students definitely requesting assistance (Yes, definitely would like help) and those who were perhaps less urgent in their request (May need help). By focusing on the column headed "Yes, definitely," it is apparent that the largest number of students were most seriously concerned in the areas of financing their education and finding employment. A total of 78% of the students said they definitely or would possibly like help with financing their education, while a total of 77% indicated they wanted help in finding employment. A total of 62% of the students indicated they would like help in choosing a major.

The final four items of Table 30 indicate that about half felt a need for further help in the areas of reading and study skills and about 60% were looking for assistance in improving expression and math skills.

TABLE 30: SPECIAL EDUCATIONAL NEEDS OF STUDENTS (IN PERCENTAGES)

NEED HELP WITH	TOTAL (MALES AND FEMALES COMBINED) YES DEFINITELY	MAY NEED HELP	NO
Financing My Education	30	48	22
Finding Employment	21	56	24
Finding a Place to Live	10	30	60
Finding a Day Care Center	5	10	85
A Health Problem	5	8	86
Transportation to Classes	6	26	67
Choosing a Major	13	49	38
Improving Reading Skills	9	43	48
Improving Study Skills	8	41	50
Improving Expression Skills	10	52	38
Improving Math Skills	14	49	37

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Interests and Career-Related Experiences. The CPP includes an inventory of student preferences for work-related activities organized according to basic types of interests. Students respond to each activity on a 5-point scale ranging from "like very much" to "dislike very much." the eight areas measured by the CPP are listed below.

1. **Business Contact**. Interest in dealing with people in a business setting, such as managing a sales department or being an office personnel manager.
2. **Business Detail**. Interest in keeping neat and accurate records and performing many of the activities in a typical business office, such as bookkeeping or typing.
3. **Trades**. Interest in activities that involve working with tools or materials (metal, wood), such as auto repair or carpentry.
4. **Technology**. Interest in activities that involve making or figuring out how mechanical devices work, such as engineering technology.
5. **Science**. Interest in areas in which the exploration or application of new ideas is stressed, such as mathematics, astronomy, or psychology.
6. **Health**. Interest in a medical environment, such as a hospital or medical laboratory.
7. **Creative Arts**. Interest in expressive or fine arts, such as writing, acting, or painting.
8. **Social Service**. Interest in helping others, such as teaching children or working for service organizations.

The information in Table 31 summarizes the vocational interest level of the students. A stanine score of 5.00 is the average score for both males and females separately and the national norm group. It is apparent that the interests of the 1976-77 students in South Carolina were somewhat higher than those of students in the norm group in the Business Contact, Creative Arts, and Social Service areas. In the Health area, the interests of South Carolina males were higher than those of males in the national norm group, while the Health area interests of the females of South Carolina appear to have been somewhat lower than those of females in the norm group. On the scales in the Business Detail, Trades, Technology, and Science areas, the South Carolina students of both sexes reported interests which are highly similar to those of students of the same sex in the norm group. These interest measures are used to provide clues to students concerning career areas they may wish to explore. For example, students with interests in Health activities which are significantly higher than the Health interests reported by other students of their sex would be guided to the possible exploration of a series of careers in the Health Career Cluster.

The career-related experience scales of the CPP summarize the work-related experiences reported by the students in the same basic areas measured by the interest scales (a scale was not developed for the health area because opportunities for experience in this area are limited for high school students). The correspondence between these two sets of measures and their adjacent locations on the student report encourage students to consider both interests and experiences as clues to career exploration directions.

TABLE 31: VOCATIONAL INTERESTS OF STUDENTS (IN STANINES)

INTEREST AREA		MALE	FEMALE	TOTAL
Business Contact	Mean	5.66	5.82	5.74
	S.D.	1.22	2.14	2.18
Business Detail	Mean	4.89	4.97	4.93
	S.D.	2.26	2.24	2.25
Trades	Mean	5.15	4.94	5.05
	S.D.	2.35	2.26	2.31
Technology	Mean	5.11	5.10	5.11
	S.D.	2.07	2.18	2.13
Science	Mean	5.07	4.95	5.01
	S.D.	2.21	2.18	2.20
Health	Mean	5.45	4.67	5.05
	S.D.	2.19	2.07	2.17
Creative Arts	Mean	5.64	5.55	5.60
	S.D.	2.22	2.22	2.22
Social Service	Mean	5.63	5.79	5.71
	S.D.	2.20	2.22	2.21

The information in Table 32 summarizes the career-related experiences in which students indicated they had already participated.

The student's reported experiences are compared with the experiences of students in the national norm group. The word "NONE" indicates the student had not tried any of the activities in that area. The word "FEW" means the student's experience level fell in the lowest 25%, while "SOME" indicates experiences similar to the middle 50% of the norm group students, and "MANY" describes a student whose experiences fell in the top 25% nationally. As is the case with the interest measures, students are compared with others of their own sex.

In the national norm group, the results for 25% of the males and 25% of the females would fall in the "MANY" category, 50% would fall in the "SOME" category, and the remaining 25% would be made up of students indicating "FEW" or "NONE."

Using the national norm group for comparison, it is apparent that the students of South Carolina reported involvement in experiences in the areas of Business Contact, Technology, Sciences, and Social Services with about the same frequency as the norm group. The students in South Carolina reported fewer Business Detail experiences and more experiences in the Creative Arts area than did students in the norm group. In the Trades experiences area, males of South Carolina reported fewer experiences than did males in the norm group, while the South Carolina females reported about the same frequency of Trades experiences as the females of the norm group.

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TABLE 32: CAREER-RELATED EXPERIENCES OF STUDENTS (IN PERCENTAGES)

EXPERIENCES AREA		NONE	FEW	SOME	MANY
Business Contact	Male	2	22	55	22
	Female	3	24	51	21
Business Detail	Male	8	8	69	16
	Female	6	24	61	9
Trades	Male	1	40	52	7
	Female	17	13	42	28
Technology	Male	1	31	43	25
	Female	6	9	67	17
Science	Male	9	19	48	24
	Female	12	10	49	29
Creative Arts	Male	2	9	46	44
	Female	1	12	48	40
Social Services	Male	5	11	53	30
	Female	2	24	50	24

Students' Interest in Specific Postsecondary Institutions. When completing the CPP, students are given the opportunity to request that a copy of their CPP student report be sent directly to a specific postsecondary institution in South Carolina. As summarized in Table 33, a total of 8,193 students (23.5%) sent their reports to institutions in the Technical Education system, with another 10,167 students (29.2%) sending reports to other South Carolina colleges. A total of 16,509 students (47.3%) did not identify an institution choice when completing the CPP.

TABLE 33: CPP STUDENT REPORTS SENT TO SOUTH CAROLINA POSTSECONDARY INSTITUTIONS AS REQUESTED BY HIGH SCHOOL JUNIORS 1976-77

SOUTH CAROLINA COLLEGES

N-COUNT	COLLEGE	N-COUNT	COLLEGE
2,450	University of South Carolina-Columbia	109	Morris College
1,885	Clemson University	104	University of South Carolina-Lancaster
1,328	South Carolina State College	103	Voorhees College
433	College of Charleston	91	North Greenville Jr. College
424	Benedict College	79	University of South Carolina-Sumter
307	Winthrop College	69	Allen University
293	Furman University	67	Erskine College
288	Francis Marion College	46	Limestone College
201	Anderson College	42	Presbyterian College
182	Columbia College		

181	University of South Carolina-Spartanburg	37	Bob Jones University
179	University of South Carolina-Coastal-Conway	30	University of South Carolina-Salkehatchie
150	The Citadel	26	Coker College
150	Spartanburg Jr. College	24	University of South Carolina-Beaufort
149	Lander College	22	Columbia Bible College
143	University of South Carolina-Aiken	21	Friendship Junior College
133	Newberry College	20	Central Wesleyan College
126	Baptist College at Charleston	20	Converse College
124	Claflin College	18	University of South Carolina-Union
113	Wofford College		
		10,167	

TECHNICAL COLLEGES AND TECHNICAL EDUCATION CENTERS

N-COUNT	TEC CENTER OR COLLEGE	N-COUNT	TEC CENTER OF COLLEGE
1,508	Greenville Technical College	329	York Technical College
856	Florence-Darlington Technical College	316	Sumter Technical College
701	Tri-County Technical College	305	Aiken TEC
684	Spartanburg Technical College	264	Chesterfield-Marlboro Technical College
514	Orangeburg-Calhoun	254	Denmark TEC
484	Midlands Technical College-Airport	208	Trident Technical College-Palmer
484	Trident Technical College-North	189	Horry-Georgetown Technical College
454	Midlands Technical College-Beltline	129	Beaufort TEC
406	Piedmont Technical College	108	Williamsburg Technical, Vocational and Adult Education Center
		8,193	

OVERVIEW

The State Board for Technical and Comprehensive Education, through its Department of Student Services, also makes the ACT Career Planning Program available to TEC students and counselors throughout the state. During 1977, 10,996 students from the TEC centers and colleges participated in the program. Of these 50.7% were males and 49.3% were females. Approximately 39% of the participants identified themselves as Caucasian Americans and 25% as Afro-Americans. Thirty percent did not respond to this item and the remaining 4% was composed of American Indians, Oriental Americans, or those of "other" racial or ethnic backgrounds.

CHARACTERISTICS, PLANS, AND NEEDS OF SOUTH CAROLINA TEC STUDENTS

The information summarized in the following tables was drawn from selected tables of the 1977-78 South Carolina Composite Technical College Career Planning Report prepared for the State Board for Technical and Comprehensive Education. The results are based on the responses of the students tested in the participating TEC centers and colleges. The various tables show basically the same kind of information that was presented in the previous section on high school juniors and the reader is referred to that section for content descriptions. Commentary here will be restricted to the content of those tables reflecting any different information and to the responses of the TEC students as reported.

Table 34 presents the ability measure stanine averages for 1977-78 TEC students, summarizing the information for males and females separately, and for the total group combined. The scores are reported in the form of stanine scores which range from a low of 1 to a high of 9.

TABLE 34: ABILITY MEASURE AVERAGES OF STUDENTS (IN STANINES)

ABILITY MEASURE		MALE	FEMALE	TOTAL
Mechanical	Mean	5.17	3.29	4.25
Reasoning	S.D.	1.96	1.55	2.00
Numerical	Mean	4.48	4.09	4.29
Skills	S.D.	2.01	1.90	1.97
Space	Mean	4.88	3.85	4.38
Relations	S.D.	2.19	1.78	2.07
Reading	Mean	4.22	4.04	4.13
Skills	S.D.	2.43	2.36	2.40
Language	Mean	4.30	4.96	4.63
Usage	S.D.	1.99	2.11	2.08
Clerical	Mean	4.24	4.40	4.32
Skills	S.D.	2.20	2.26	2.23
Estimated ACT	Mean	16.87	16.08	16.48
Composite	S.D.	4.66	4.39	4.54

A review of Table 34 reveals that male students scored higher than females in Mechanical Reasoning, Numerical Skills, Space Relations, and Reading Skills and that females scored higher than males in Language Usage and Clerical Skills.

In Table 35, the average high school grades reported by TEC students completing the CPP are summarized. In reviewing the results for males and females, it is clear that females received higher grades in all five grading categories, with the largest grade difference occurring in the English area.

TABLE 35: AVERAGE HIGH SCHOOL GRADES OF STUDENTS

COURSE AREA		MALE	FEMALE	TOTAL
English	Mean	2.23	2.69	2.46
	S.D.	0.78	0.76	0.80
Math	Mean	2.30	2.43	2.36
	S.D.	0.87	0.85	0.86
Social Science	Mean	2.38	2.59	2.48
	S.D.	0.85	0.85	0.85
Natural Science	Mean	2.20	2.41	2.31
	S.D.	0.82	0.81	0.82
Business/ Vocational	Mean	2.69	2.89	2.80
	S.D.	0.82	0.80	0.82

Educational and Occupational Plans. The information summarized in Table 36 describes the highest level of education presently planned by TEC students in South Carolina. Only 13% of the 1977-78 students were planning to go on to four years of college or more, with 49% planning a postsecondary program of up to two years in length. Approximately 5% of the students were interested in an occasional course after high school, while 6% planned to discontinue their formal education after receiving their high school diploma. It is interesting to note that males (62%) and females (63%) have almost identical goals involving postsecondary educational programs. It is also interesting that over one-fourth of all students (27%) did not respond to this item.

TABLE 36: HIGHEST LEVEL OF EDUCATION PLANNED BY STUDENTS (IN PERCENTAGES)

EDUCATION PLANNED	MALE	FEMALE	TOTAL
High School Diploma	7	5	6
Occasional Course Beyond HS	6	3	5
Voc., Business or Tech Program (two years or less)	26	23	24
Two-Year College Degree	22	28	25
Four-Year College Degree	9	9	9
One or More Yrs. of Grad. Study	5	3	4
Not Given	25	28	27

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Those students planning to continue with their education were asked to respond to further questions regarding their plans. The results of these are shown in Table 37.

TABLE 37: PLANS OF STUDENTS CONTINUING WITH POSTSECONDARY EDUCATION (IN PERCENTAGES)

PLANS TO ENROLL AS A	MALE	FEMALE	TOTAL
Full-Time Student	49	53	51
Part-Time Student	22	16	19
Not Given	30	31	30
PLANS TO ATTEND CLASSES			
During the Day	37	53	45
During the Evening	33	16	25
Not Given	30	31	30
HOURS PER WEEK EXPECTS TO WORK DURING FIRST YEAR OF COLLEGE			
None	8	19	14
1–10	7	11	9
11–15	7	7	7
16–20	9	8	9
21–30	8	8	8
31 or more	27	12	20
Not Given	34	35	35

When asked to identify their educational program and occupational choice preferences, TEC students provided the information summarized in Table 38. Males most frequently identified their first choice educational program as being in the Trades, Crafts, and Industries cluster (42%) and the Technologies cluster (18%), while females more often identified programs in the Health Services/Sciences clusters (35%) and Business Operations (31%).

TABLE 38: EDUCATIONAL PROGRAM AND OCCUPATIONAL CHOICES OF STUDENTS BY CAREER CLUSTERS (IN PERCENTAGES)

	FIRST EDUCATIONAL PROGRAM CHOICE			OCCUPATIONAL CHOICE		
CLUSTER	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
Social and Personal Services	7	13	10	10	16	13
Business Sales and Management	14	6	10	12	5	9
Business Operations	7	31	19	6	29	17
Trades, Crafts, and Industries	42	3	23	42	3	23
Technologies	18	4	11	18	3	11
Natural and Social Sciences	3	3	3	2	2	2
Health Services/Sciences	4	35	19	4	34	18
Creative and Applied Arts	2	3	3	2	2	2
Undecided	2	1	2	4	5	5

Special Educational Needs. When asked what special educational needs they had, the students responded as shown in Table 39. The information in the table summarizes the responses of both males and females combined and identifies the percentage of students definitely requesting assistance (Yes, definitely would like help) and those who were perhaps less urgent in their request (May need help). By focusing on the column headed "Yes, definitely," it is apparent that the largest number of students are most seriously concerned in the areas of financing their education and finding employment. A total of 66% of the students said they definitely or would possibly like help both with financing their education and in finding employment. A total of 18% of the students indicated they would like help in finding transportation to classes.

The final four items of Table 39 indicate that about half felt a need for further help in the areas of reading and study skills and over 60% were looking for assistance in improving expression and math skills.

TABLE 39: SPECIAL EDUCATIONAL NEEDS OF STUDENTS (IN PERCENTAGES)

	TOTAL (MALES AND FEMALES COMBINED)		
NEED HELP WITH	YES DEFINITELY	MAY NEED HELP	NO
Financing My Education	39	27	34
Finding Employment	26	40	35
Finding a Place to Live	5	8	87
Finding a Day Care Center	3	6	90
A Health Problem	2	4	94
Transportation to Classes	5	13	82
Choosing a Major	11	38	51
Improving Reading Skills	8	46	46
Improving Study Skills	8	40	52
Improving Expression Skills	10	54	36
Improving Math Skills	16	53	31

Interests and Career-Related Experiences. The CPP includes an inventory of student preferences for work-related activities organized according to basic types of interests. Students respond to each activity on a 5-point scale ranging from "like very much" to "dislike very much." The information in Table 40 summarizes the vocational interest level of the students.

TABLE 40: VOCATIONAL INTERESTS OF STUDENTS (IN STANINES)

INTEREST AREA		MALE	FEMALE	TOTAL
Business	Mean	5.83	5.69	5.76
	S.D.	2.25	2.18	2.22
Business Detail	Mean	5.72	5.66	5.69
	S.D.	2.32	2.24	2.28
Trades	Mean	5.63	5.07	5.36
	S.D.	2.36	2.35	2.37
Technology	Mean	5.79	5.47	5.63
	S.D.	2.07	2.24	2.16
Science	Mean	5.61	5.62	5.62
	S.D.	2.13	2.16	2.15

INTEREST AREA		MALE	FEMALE	TOTAL
Health	Mean	5.64	5.53	5.59
	S.D.	2.26	2.21	2.24
Creative Arts	Mean	5.59	5.27	5.44
	S.D.	2.25	2.23	2.25
Social Service	Mean	6.34	6.01	6.18
	S.D.	2.11	2.20	2.16

The career-related experience scales of the CPP summarize the work-related experiences reported by the student in the same basic areas measured by the interest scales (a scale was not developed for the health area because opportunities for experience in this area are limited for students.) The correspondence between these two sets of measures and their adjacent locations on the student report encourage students to consider both interests and experiences as clues to career exploration directions.

The information in Table 41 summarizes the career-related experiences in which students indicate they have already participated.

TABLE 41: CAREER-RELATED EXPERIENCES OF STUDENTS (IN PERCENTAGES)

EXPERIENCES AREA		NONE	FEW	SOME	MANY
Business Contact	Male	1	12	53	34
	Female	2	16	49	33
Business Detail	Male	5	5	50	40
	Female	5	14	51	30
Trades	Male	1	31	54	14
	Female	22	11	40	27
Technology	Male	1	27	38	34
	Female	15	12	57	15
Science	Male	19	23	40	17
	Female	22	12	43	23
Creative Arts	Male	6	16	47	32
	Female	2	20	48	31
Social Service	Male	7	15	50	28
	Female	2	28	46	24

The student's reported experiences are compared with the experiences of students in the national norm group. The word "NONE" indicates the student had not tried any of the activities in that area. The word "FEW" means the student's experience level fell in the lowest 25%, while "SOME" indicates experiences similar to the middle 50% of the norm group students, and "MANY" describes a student whose experiences fell in the top 25% nationally. As is the case with the interest measures, students are compared with others of their own sex.

Using the national norm group for comparison, the TEC students of South Carolina can be seen as having had more career-related experiences in the areas of Business Detail, Business Contact, and Creative Arts, about the same in Social Services and Technology, and slightly less in Trades and Sciences.

PROCESS VARIABLES

Course Offerings – Secondary

A total of 169 separate courses are offered in the nine secondary vocational program areas in South Carolina. The following summarizes the number of courses offered in each program area:

PROGRAM AREA	NUMBER OF COURSES
Agriculture	26
Distributive Education	4
Health Occupations	10
Secondary – 5	
Postsecondary – 5	
Consumer & Homemaking	17
Occupational Home Economics	10
Office Occupations	7
Trade & Industrial	87
Industrial Arts	5
Prevocational	3
TOTAL	169

Table 42 indicates the courses available, by course title, in each county of the state.

TABLE 42

SECONDARY VOCATIONAL COURSE OFFERINGS

COURSE TITLE	Abbeville	Aiken	Allendale	Anderson	Bamberg	Barnwell	Beaufort	Berkeley	Calhoun	Charleston	Cherokee	Chester	Chesterfield	Clarendon	Colleton	Darlington	Dillon	Dorchester	Edgefield	Fairfield	Florence	Georgetown	Greenville	Greenwood	Hampton	Horry	Jasper	Kershaw	Lancaster	Laurens	Lee	Lexington	McCormick	Marion	Marlboro	Newberry	Oconee	Orangeburg	Pickens	Richland	Saluda	Spartanburg	Sumter	Union	Williamsburg	York	Special Institutions	Total
AGRICULTURE																																															
Ag. Production	X	X	X	X	X	X	X	X	X		X		X	X	X	X	X	X		X	X	X	X	X	X	X		X	X	X		X		X	X		X	X	X		X	X	X		X	X		37
Livestock Mgmt. I								X								X									X			X	X					X				X				X	X			X		10
Livestock Mgmt. II										X									X							X								X								X						5
Ag. Science	X	X	X	X	X	X		X	X		X		X	X	X	X	X	X		X	X	X	X	X	X	X		X	X	X		X	X	X	X		X	X	X		X	X	X		X	X		37
Ag. Prod., Bus. Mgmt. I	X			X	X	X		X	X		X				X	X	X		X		X	X	X		X	X			X	X	X	X	X	X			X	X				X	X		X	X		28
Ag. Prod., Bus. Mgmt. II				X									X		X	X	X		X		X	X			X	X					X			X	X		X		X			X						16
Ag. Sales & Services I										X				X												X								X														4
Ag. Sales & Services II																					X					X																						2
Ag. Chemicals I																																																0
Ag. Chemicals II																																																0
Ag. Mechanics I	X	X	X	X		X		X	X	X		X	X	X	X	X	X				X		X	X		X		X	X	X	X	X		X	X	X	X	X	X		X	X	X		X			35
Ag. Mechanics II	X			X				X	X	X		X	X	X	X	X	X				X		X	X		X					X	X		X	X	X			X		X	X	X					24
Ag. Products I																																	X		X													2
Ag. Products II													X		X										X	X												X										5
Orn. Horticulture I		X		X			X			X			X	X		X			X	X	X		X		X	X		X	X			X		X			X	X	X			X	X	X		X	X	25
Orn. Horticulture II		X		X				X								X					X		X			X						X					X		X			X				X		12
Floriculture I																																											X					1
Floriculture II																																																0
Turf & Lawn Mgmt. I						X												X								X																			X			4
Turf & Lawn Mgmt. II																										X																						1
Envir. & Nat. Resources I		X																					X														X								X			4
Envir. & Nat. Resources II																																X																1
Forestry I								X											X	X						X		X				X													X			7
Forestry II																																																0
Pulpwood Harvesting I				X											X							X							X					X														5
Pulpwood Harvesting II																																		X														1
NO. OF COURSES	5	6	3	9	3	5	2	8	5	5	4	2	7	6	8	9	6	4	5	4	9	5	8	4	7	15	0	6	7	4	4	9	3	12	6	2	8	7	7	0	4	10	8	1	7	6	1	266
DISTRIBUTIVE EDUCATION																																															
Fashion Merchandising				X																		X				X		X				X						X		X						X		8
Fashion Merchandising																																																0
Distributive Ed. I		x		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X	X		X	X	X	X	X		X		X	X	X		X		37
Distributive Ed. II-Co-Op		X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X				X	X	X		X	X		X	X		X		X	X			X		33
NO. OF COURSES	0	2	0	3	2	2	2	2	0	2	2	2	2	2	2	2	2	2	2	1	2	3	2	2	2	3	0	2	0	2	2	3	0	2	2	1	2	3	0	3	0	2	2	1	0	3	0	78

COURSE TITLE	Abbeville	Aiken	Allendale	Anderson	Bamberg	Barnwell	Beaufort	Berkeley	Calhoun	Charleston	Cherokee	Chester	Chesterfield	Clarendon	Colleton	Darlington	Dillon	Dorchester	Edgefield	Fairfield	Florence	Georgetown	Greenville	Greenwood	Hampton	Horry	Jasper	Kershaw	Lancaster	Laurens	Lee	Lexington	McCormick	Marion	Marlboro	Newberry	Oconee	Orangeburg	Pickens	Richland	Saluda	Spartanburg	Sumter	Union	Williamsburg	York	Special Institutions	Total
HEALTH OCCUPATIONS																																															
SECONDARY																																															
Practical Nursing (Phase I)											X	X									X			X		X		X				X		X	X		X		X	X		X				X		14
Nursing Assistant (Aide)								X												X			X												X									X			X	6
Health Occ. I		X		X		X	X			X		X					X				X					X									X	X			X	X		X		X			X	16
Health Occ. II										X							X						X			X														X		X						6
Nursing Experimental										X																																						1
NO. OF COURSES	0	1	0	1	0	1	1	1	0	3	1	2	0	0	0	0	2	0	0	1	2	0	2	1	0	3	0	1	0	0	0	1	0	1	3	1	1	0	2	3	0	3	0	2	0	1	2	43
POSTSECONDARY																																															
Dental Assisting				X																																												1
Practical Nursing (12 Month)		X		X												X													X	X		X								X		X	X					9
Practical Nursing (Phase II)											X	X									X			X		X		X				X		X	X		X		X			X				X		13
Surgical Technician				X																																												1
Inhalation Therapy Technician																								X																								1
NO. OF COURSES	0	1	0	3	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	1	0	0	2	0	1	0	1	1	1	0	2	0	1	1	0	1	0	1	1	0	2	1	0	0	1	0	25
CONSUMER & HOMEMAKING																																															
Basic Cons. & Homemaking	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	47
Advanced Cons. & Homemaking	X	X		X		X	X	X	X	X	X		X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	41
Child Development I		X	X	X		X	X	X		X		X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X		X	X	X	X	X		39
Child Development II	X						X		X	X													X			X	X					X		X		X		X		X		X			X			14
Clothing & Textiles I	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	43
Clothing & Textiles II	X	X		X			X	X	X	X	X	X	X			X	X	X	X	X	X		X			X			X			X		X			X	X	X	X		X	X	X	X	X		30
Consumer Ed. I	X	X		X		X		X	X	X		X	X	X	X	X		X			X	X	X		X	X	X	X	X	X	X	X			X	X	X	X	X	X		X	X		X	X		34
Consumer Ed. II				X		X		X	X																						X																	5
Family Life Ed. I	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	46
Family Life Ed. II				X			X	X	X	X			X	X									X									X				X	X	X	X	X	X	X	X		X			18
Foods & Nutrition I	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	45
Foods & Nutrition II		X		X			X	X	X	X	X		X			X	X	X		X	X		X	X		X						X		X		X	X		X	X			X		X	X	X	26
Housing & Home Furn. I	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X		X	X	X	X		X	X		X	X	X	X	X	X	X	X	X	X			X		37
Housing & Home Furn. II																							X			X																						2
Human Sexuality I		X						X	X	X								X													X		X	X			X	X							X			11
Human Sexuality II								X		X																																X			X			4
Cons. & Homemaking Experimental		X						X				X						X			X		X									X			X		X		X	X								11
NO. OF COURSES	9	12	6	12	3	9	11	14	13	15	17	9	11	9	8	9	8	11	7	5	11	7	14	8	6	12	9	8	9	7	10	13	6	11	9	11	13	12	12	13	5	12	11	7	14	9	6	453

COURSE TITLE	Abbeville	Aiken	Allendale	Anderson	Bamberg	Barnwell	Beaufort	Berkeley	Calhoun	Charleston	Cherokee	Chester	Chesterfield	Clarendon	Colleton	Darlington	Dillon	Dorchester	Edgefield	Fairfield	Florence	Georgetown	Greenville	Greenwood	Hampton	Horry	Jasper	Kershaw	Lancaster	Laurens	Lee	Lexington	McCormick	Marion	Marlboro	Newberry	Oconee	Orangeburg	Pickens	Richland	Saluda	Spartanburg	Sumter	Union	Williamsburg	York	Special Institutions	Total
HOME ECONOMICS																																																
OCCUPATIONAL																																																
Child Care Serv. I				X	X		X			X	X							X			X							X										X		X			X	X		X		13
Child Care Serv. II											X							X					X					X												X			X	X		X		8
Clothing Serv. I										X																X																		X				3
Clothing Serv. II																																																0
Food Services I		X		X			X	X		X	X			X	X	X	X				X	X	X			X		X						X			X	X	X	X		X	X			X	X	24
Food Services II		X					X			X	X				X		X					X	X			X		X									X	X		X			X			X		15
Housing & Home Furn. Serv. I								X		X																																						2
Housing & Home Furn. Serv. II																																																0
Inst. & Home Mgmt. Serv. I							X	X	X																																X							4
Inst. & Home Mgmt. Serv. II																																																0
Home Economics Experimental																				X																												1
NO. OF COURSES	0	2	0	2	1	0	4	3	1	5	4	0	0	1	2	1	2	2	0	1	2	2	3	0	0	3	0	4	0	0	0	0	0	1	0	0	2	3	1	4	1	1	4	3	0	4	1	70
OFFICE OCCUPATIONS																																																
Accounting Major		X		X		X	X	X		X	X		X			X		X		X	X	X	X	X	X	X			X	X	X	X		X	X		X	X	X	X	X	X	X		X	X		32
Keypunch Major																												X	X											X						X		4
Data Processing Major																												X	X																			2
General Clerical Major	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	47
Stenographic Major		X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X			X	X	X	X		X	X	X	X	X	X	X		X	X	X	X	X		39
Sr. Intensified Major													X				X																		X					X		X	X			X		7
Cooperative										X								X																				X										3
NO. OF COURSES	1	3	2	3	1	3	3	3	2	4	3	2	4	2	2	3	3	4	2	3	3	3	3	3	2	3	1	3	5	3	3	3	1	3	4	2	3	4	3	5	2	4	4	2	3	5	1	134
TRADES AND INDUSTRY																																																
Air Cond., Ref. & Heating I		X	X	X			X	X		X	X					X	X	X		X	X		X			X		X	X	X		X		X	X	X	X	X	X	X		X	X	X		X		29
Air Cond., Ref. & Heating II		X	X					X		X	X					X	X	X		X	X		X			X		X	X	X		X		X	X	X	X	X	X	X		X	X	X		X		27
Air Cond., Ref. & Heating III																													X							X												2
Appliance Repair I				X						X																																					X	3
Appliance Repair II				X						X																																						2
Appliance Repair III																																																0
Auto Body Repair I				X						X						X		X		X	X	X	X	X		X			X			X		X		X	X	X		X		X	X	X		X	X	22
Auto Body Repair II				X						X																						X		X			X	X		X		X	X			X		17
Auto Body Repair III																																																0
Auto Mechanics I		X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	42

COURSE TITLE	Abbeville	Aiken	Allendale	Anderson	Bamberg	Barnwell	Beaufort	Berkeley	Calhoun	Charleston	Cherokee	Chester	Chesterfield	Clarendon	Colleton	Darlington	Dillon	Dorchester	Edgefield	Fairfield	Florence	Georgetown	Greenville	Greenwood	Hampton	Horry	Jasper	Kershaw	Lancaster	Laurens	Lee	Lexington	McCormick	Marion	Marlboro	Newberry	Oconee	Orangeburg	Pickens	Richland	Saluda	Spartanburg	Sumter	Union	Williamsburg	York	Special Institutions	Total
Auto Mechanics II		X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X		42
Auto Mechanics III													X									X														X										X		4
Auto Services													X									X										X																3
Bus. Machine Maint. I										X																																						1
Bus. Machine Maint. II										X																																						1
Bus. Machine Maint. III																																																0
Commercial Art I																												X																				1
Commercial Art II																												X																				1
Commercial Art III																																																0
Commer. Photography I																																																0
Commer. Photography II																																																0
Commer. Photography III																																																0
Building Construction I	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X		X	X	X		X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	41
Building Construction II	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X		X	X	X		X	X	X	X	X	X	X	X	X		X	X	X	X	X		40
Building Construction III			X										X								X															X												4
Electricity I		X	X	X		X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X	X	X	X		X	X		X	X	X	X		X	X	X	X	X	X	39
Electricity II		X	X	X		X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X		X	X	X		X	X		X	X	X	X		X	X	X	X	X		36
Electricity III													X									X							X																			3
Masonry I		X	X	X	X	X	X	X		X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	42
Masonry II		X	X	X	X	X	X	X		X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X		X	X	X	X	X		40
Masonry III																						X																										1
Tilesetting I																							X																									1
Tilesetting II																							X																									1
Painting & Decr. 'g I																										X																				X		2
Painting & Decr. 'g II																										X																				X		2
Painting & Decr. 'g III																																																0
Plumbing & Pipefitting I			X				X	X		X	X										X		X									X					X	X	X			X			X	X		14
Plumbing & Pipefitting II								X		X	X												X									X					X	X	X			X			X	X		11
Plumbing & Pipefitting III																																																0
Drafting I		X		X		X		X		X		X						X			X		X			X	X		X			X		X	X		X		X	X		X				X		20
Drafting II		X		X				X		X		X						X			X		X						X			X		X	X		X		X	X		X				X		17
Drafting III				X																																												1
Electronics I		X		X						X						X					X							X											X	X		X				X		10
Electronics II		X		X						X						X					X							X											X	X		X						9
Electronics III				X												X																																2
Radio & T.V. Repair I																																				X			X							X		3

COURSE TITLE	Abbeville	Aiken	Allendale	Anderson	Bamberg	Barnwell	Beaufort	Berkeley	Calhoun	Charleston	Cherokee	Chester	Chesterfield	Clarendon	Colleton	Darlington	Dillon	Dorchester	Edgefield	Fairfield	Florence	Georgetown	Greenville	Greenwood	Hampton	Horry	Jasper	Kershaw	Lancaster	Laurens	Lee	Lexington	McCormick	Marion	Marlboro	Newberry	Oconee	Orangeburg	Pickens	Richland	Saluda	Spartanburg	Sumter	Union	Williamsburg	York	Special Institutions	Total
Radio & T.V. Repair II																																					X			X								2
Radio & T.V. Repair III																																																0
Graphic Communications I		X		X			X	X		X	X	X				X	X	X		X			X					X				X		X				X	X	X		X	X	X		X	X	23
Graphic Communications II		X		X						X	X	X				X	X	X		X			X					X				X		X				X	X	X		X	X			X	X	20
Graphic Communications III																																															X	1
Machine Shop I	X	X	X	X				X		X	X	X			X	X				X			X	X		X		X	X	X					X	X	X		X	X		X		X				24
Machine Shop II	X	X	X	X						X	X	X			X	X				X			X	X		X		X	X	X					X	X	X		X	X		X		X				23
Machine Shop III																													X								X											2
Metal Working & Fab. I																													X																			1
Metal Working & Fab. II																																																0
Sheet Metal I											X												X																X			X						4
Sheet Metal II											X												X																X			X						4
Sheet Metal III																																																0
Welding I		X		X	X	X	X	X		X	X			X	X	X		X	X	X	X	X	X		X	X		X	X			X				X	X	X	X	X		X	X			X	X	31
Welding II		X		X				X		X	X			X	X	X		X	X	X		X	X		X	X		X				X					X	X	X	X		X	X			X		24
Welding III																						X																										1
Barbering I																																																0
Barbering II																																																0
Barbering III																																																0
Cosmetology I	X	X	X	X						X	X		X			X	X			X	X	X	X	X					X			X		X		X	X		X	X		X		X		X		24
Cosmetology II	X	X	X	X						X	X		X			X	X			X	X	X	X	X					X			X					X		X	X		X		X		X		22
Cosmetology III				X																												X																2
Small Engine Repair I	X						X			X	X			X				X			X		X			X			X		X							X		X	X					X	X	16
Small Engine Repair II	X									X	X			X				X			X					X												X		X						X		10
Small Engine Repair III																																																0
Textiles I				X							X	X	X								X		X	X		X			X	X							X		X			X					X	14
Textiles II				X							X	X	X								X		X	X					X	X							X		X			X					X	13
Textiles III																																																0
Tailoring I										X													X																									2
Tailoring II										X													X																									2
Tailoring III																																																0
Industrial Sewing I		X	X	X	X	X	X			X	X	X	X	X		X	X	X	X	X	X	X		X	X	X		X	X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X	38
Industrial Sewing II		X	X	X						X		X	X			X	X	X			X	X		X	X			X	X	X	X	X	X		X	X	X	X	X		X				X	X		27
Cabinet Making I		X											X																		X									X		X				X	X	7
Cabinet Making II													X																											X		X						3
Cabinet Making III																																																0

COURSE TITLE	Abbeville	Aiken	Allendale	Anderson	Bamberg	Barnwell	Beaufort	Berkeley	Calhoun	Charleston	Cherokee	Chester	Chesterfield	Clarendon	Colleton	Darlington	Dillon	Dorchester	Edgefield	Fairfield	Florence	Georgetown	Greenville	Greenwood	Hampton	Horry	Jasper	Kershaw	Lancaster	Laurens	Lee	Lexington	McCormick	Marion	Marlboro	Newberry	Oconee	Orangeburg	Pickens	Richland	Saluda	Spartanburg	Sumter	Union	Williamsburg	York	Special Institutions	Total
Diversified Occ. I				X							X					X							X									X								X								6
Diversified Occ. II				X																			X									X																3
T & I Experimental											X										X								X					X								X						5
NO. OF COURSES	8	25	18	33	8	9	13	18	0	36	29	18	17	13	12	26	16	21	8	21	29	20	35	18	10	23	1	23	28	16	10	28	7	19	16	20	28	22	30	31	3	34	16	16	12	32	15	891
INDUSTRIAL ARTS																																																
Ind. Arts Lab. I		X	X	X	X	X	X			X	X				X	X			X		X		X			X	X		X			X		X	X		X	X	X	X	X	X	X				X	27
Ind. Arts Lab. II		X		X						X					X	X					X		X															X		X	X	X	X					12
Mechanical Drawing I		X		X			X			X	X				X	X			X		X	X	X	X		X				X		X	X					X	X	X	X	X	X		X			23
Mechanical Drawing II		X		X						X	X								X		X		X	X								X								X	X	X	X					13
Ind. Arts Experimental				X							X																					X																3
NO. OF COURSES	0	4	1	5	1	1	2	0	0	4	4	0	0	0	3	3	0	0	3	0	4	1	4	2	0	2	1	0	1	1	0	4	1	1	1	0	1	3	2	4	4	4	4	0	1	0	1	78
PREVOCATIONAL																																																
Prevocational I	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	46
Prevocational II		X		X	X	X	X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X	X			X		X	X	X	X	X	X	X	X		X		37
Prevocational Experimental				X	X			X		X												X	X													X					X					X		9
NO. OF COURSES	1	2	1	3	3	2	2	3	2	3	1	2	1	2	2	2	2	2	2	1	2	3	3	2	2	2	2	2	2	1	2	2	1	1	2	2	2	2	2	2	3	2	2	2	1	3	1	92
GRAND TOTAL	24	58	31	74	22	32	40	52	23	77	56	38	42	35	39	56	41	46	29	37	65	44	74	42	29	67	14	50	53	35	31	65	19	52	44	39	61	56	60	66	22	74	52	34	38	64	28	2130

Available Programs - Postsecondary

The technical education institutions (TEC's) in South Carolina offer a total of 145 separate programs in seven areas of study. These are summarized as follows:

AREA OF STUDY	NUMBER OF PROGRAMS	
	Associate Degree	Diploma
Agricultural Technology	12	2
Arts and Science	2	–
Business Technology	15	10
Engineering	17	–
Health Science	13	8
Industrial	18	43
Public Service	3	2
TOTAL	80	65

Table 43 indicates the programs available at each of the 16 TEC's.

TABLE 43 **AVAILABLE POSTSECONDARY PROGRAMS**

AREA OF STUDY	AIKEN	BEAUFORT	CHESTERFIELD–MARLBORO	DENMARK	FLORENCE–DARLINGTON	GREENVILLE	HORRY–GEORGETOWN	MIDLANDS	ORANGEBURG–CALHOUN	PIEDMONT	SPARTANBURG	SUMTER	TRI–COUNTY	TRIDENT	WILLIAMSBURG	YORK	TOTAL
AGRICULTURAL TECHNOLOGY	0	0	1	0	1	0	3	2	1	0	1	2	4	1	0	0	16
Assoc. Degree Programs	0	0	0	0	1	0	3	1	1	0	1	1	4	1	0	0	13
Ag. Chem. & Mech. Tech.												X					1
Agronomy					X												1
Animal & Plant Science									X								1
Animal Health Tech.													X				1
Animal Science													X				1
Dairy Science													X				1
Forestry							X										1
Golf Course Management							X										1
Horticulture (Pomology)											X						1
Horticultural Tech.								X						X			2
Parks Operation							X										1
Poultry Science													X				1
Diploma Programs	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	3
Farm Machinery Tech.			X									X					2
Horticulture								X									1
ARTS & SCIENCE	0	0	2	0	0	2	0	2	0	0	0	0	2	2	0	2	12
Assoc. Degree Programs	0	0	2	0	0	2	0	2	0	0	0	0	2	2	0	2	12
Associate in Arts			X			X		X					X	X		X	6
Associate in Science			X			X		X					X	X		X	6
BUSINESS TECHNOLOGY	6	6	5	2	9	12	6	13	7	7	11	6	6	11	3	8	118
Assoc. Degree Programs	4	5	4	1	6	11	3	12	6	4	8	6	5	7	2	5	89
Accounting	X	X	X		X	X		X	X	X	X	X	X	X		X	13
Banking & Finance					X			X	X			X					4
Computer Programming						X		X			X			X		X	5
Data Processing					X	X		X	X		X			X		X	7
Food Service Mgt.						X											1
General Business	X	X	X			X	X	X	X	X	X	X	X	X	X	X	14
Hotel/Motel/Rest. Mgt.		X					X										2
Insurance Management						X		X									2
Legal Assistant Tech.						X		X									2
Management	X		X			X		X			X	X	X	X			8
Marketing		X			X	X		X	X	X	X	X	X	X			10
Medical Unit Mgt.								X									1
Real Estate Mgt.								X									1
Secretarial Science	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	16
Transportation Mgt.					X	X					X						3
Diploma Programs	2	1	1	1	3	1	3	1	1	3	3	0	1	4	1	3	29
Clerical Assistant					X				X								2
Data Processing Asst.														X			1
Data Processing Mach. Op.							X				X					X	3
Fashion Merchandising	X				X					X							3
General Business							X										1

AREA OF STUDY	AIKEN	BEAUFORT	CHESTERFIELD–MARLBORO	DENMARK	FLORENCE–DARLINGTON	GREENVILLE	HORRY–GEORGETOWN	MIDLANDS	ORANGEBURG–CALHOUN	PIEDMONT	SPARTANBURG	SUMTER	TRI–COUNTY	TRIDENT	WILLIAMSBURG	YORK	TOTAL
General Office		X		X			X	X		X	X		X	X	X	X	10
Hotel/Motel Clerk					X												1
Medical Secretary														X			1
Technical Secretary	X		X			X					X			X		X	6
Ward Clerk Secretary										X							
ENGINEERING																	
Assoc. Degree Programs	5	1	2	4	6	8	2	10	4	4	5	3	7	10	2	6	79
Architectural Eng. Tech.						X		X						X			3
Broadcast Eng. Tech.													X				1
Chemical Eng. Tech.														X			1
Civil Eng. Tech. (Surv.)								X						X			2
Civil Eng. Tech.					X	X	X	X			X	X	X	X	X	X	10
Electrical Eng. Tech.								X						X			2
Electro-Mech. Eng. Tech.	X																1
Electronics Eng. Tech.	X			X	X	X		X		X	X		X	X		X	10
Engineering Graphics Tech.			X	X	X	X			X	X	X		X			X	9
Environmental Eng. Tech.												X					1
General Eng. Tech.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	16
Industrial Eng. Tech.	X				X	X		X	X	X			X			X	8
Mechanical Eng. Tech.						X		X	X		X			X		X	6
Nuclear Eng. Tech.	X			X				X						X			4
Nuclear Eng. Tech. (RO)					X								X				2
Safety & Health Eng. Tech.								X						X			2
Water & Wastewater Eng. Tech.						X											1
HEALTH SCIENCE	0	1	1	0	6	12	1	7	4	5	5	1	2	10	0	4	59
Assoc. Degree Programs	0	0	0	0	4	8	0	4	2	2	2	0	2	8	0	3	35
Dental Assisting														X			1
Dental Hygiene					X	X		X									3
Dental Laboratory Tech.						X								X			2
Extracorporeal Cir. Tech.														X			1
Histotechnology														X			1
Medical Assistant Tech.										X			X				2
Medical Laboratory Tech.					X	X		X	X		X		X	X		X	8
Nursing					X	X										X	3
Opthalmic Technician														X			1
Optometric Technology						X											1
Physical Therapy Asst.						X											1
Radiologic Technology					X	X		X	X	X	X			X		X	8
Respiratory Therapy						X		X						X			3
Diploma Programs	0	1	1	0	2	4	1	3	2	3	3	1	0	2	0	1	24
Certified Lab Asst.						X					X						2
Dental Assistant					X	X		X			X						4
Histologic Technology														X			1
Medication Tech.										X							1
Nurse Practical - LPN		X				X		X	X					X			5

AREA OF STUDY	AIKEN	BEAUFORT	CHESTERFIELD–MARLBORO	DENMARK	FLORENCE–DARLINGTON	GREENVILLE	HORRY–GEORGETOWN	MIDLANDS	ORANGEBURG–CALHOUN	PIEDMONT	SPARTANBURG	SUMTER	TRI–COUNTY	TRIDENT	WILLIAMSBURG	YORK	TOTAL
Nursing Assistant			X														1
Respiratory Therapy							X			X							2
Operating Room Tech.					X	X		X	X	X	X	X				X	8
INDUSTRIAL	11	13	13	18	12	21	11	21	13	15	16	11	13	14	15	11	228
Assoc. Degree Programs	3	2	9	1	6	7	2	6	3	4	6	2	5	5	1	4	66
Aircraft Maintenance Tech.					X									X			2
Automotive Tech.			X													X	2
Aviation Technology					X												1
Bldg. Construction Tech.		X				X		X									3
Chemical Tech.						X											1
Climate Control Tech.			X					X									2
Commercial Graphics														X			1
Electronic Instrumentation									X								1
Electronics Tech.			X								X						2
General Technology	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	16
Industrial Mgt.			X		X			X		X	X			X		X	7
Industrial Safety & Mgt. Technology			X														1
Machine Tool Tech.			X		X	X		X					X				5
Mgt. Tng./Dyeing & Fing.											X						1
Radio & TV Broadcasting													X				1
Textile Mgt.	X		X			X				X	X		X				6
Voc-Technical Ed.	X		X		X	X	X	X	X	X	X	X	X	X		X	13
Wastewater Tech.						X											1
Diploma Programs	8	11	4	17	6	14	9	15	10	11	10	9	8	9	14	7	162
Air Conditioning-Ref.	X	X		X	X		X			X	X	X	X			X	10
Auto Body Repair		X		X		X		X		X			X	X	X		8
Auto Diesel Mechanic					X												1
Automotive	X	X		X			X	X		X	X	X				X	9
Automotive Mechanic						X		X	X		X		X	X	X		7
Barbering				X													1
Boiler Making									X								1
Cabinet Making													X				1
Carpentry		X		X		X		X							X		5
Chemical Lab Assistant	X					X									X		3
Commercial Fishing		X															1
Commercial Sewing				X											X		2
Construction Mgt.										X							1
Cosmetology		X		X											X		3
Diesel Equipment Mech.						X		X	X								3
Electrical Inst. & Maint.												X					1
Engineering Aide												X					1

	AIKEN	BEAUFORT	CHESTERFIELD–MARLBORO	DENMARK	FLORENCE–DARLINGTON	GREENVILLE	HORRY–GEORGETOWN	MIDLANDS	ORANGEBURG–CALHOUN	PIEDMONT	SPARTANBURG	SUMTER	TRI–COUNTY	TRIDENT	WILLIAMSBURG	YORK	TOTAL
AREA OF STUDY																	
Food Service		X		X		X											3
Heavy Equip. Operator						X		X									2
Industrial Drafting	X						X	X		X	X	X		X	X	X	9
Industrial Electricity	X	X	X	X		X	X	X	X					X	X	X	11
Industrial Electronics			X		X			X		X	X	X	X				7
Industrial Lab Asst.									X								1
Industrial Sewing															X		1
Machine Tool	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	15
Maintenance Mechanics	X						X		X								3
Masonry		X		X		X		X					X		X		6
Metal Fabrication								X									1
Pipefitting						X				X	X						3
Plumbing						X					X						2
Plumbing & Pipefitting				X											X		2
Power Mechanics									X					X			2
Printing								X									1
Radio & TV Electronics				X	X		X			X					X		5
Radio & TV Repair								X						X			2
R.C.I. Electricity							X										1
Sewing Machine Repair				X													1
Shoe Repair				X													1
Tailoring				X													1
Tool & Die Making									X	X	X	X		X		X	6
Truck Driver						X											1
Watchmaking									X								1
Welding	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	16
PUBLIC SERVICE	0	1	0	0	2	1	1	3	1	2	1	1	2	2	0	0	17
Assoc. Degree Programs	0	1	0	0	2	1	1	3	1	2	0	1	1	2	0	0	15
Criminal Justice		X			X	X	X	X	X	X		X	X	X			10
Fire Science								X									1
Human Service					X			X		X				X			4
Diploma Programs	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
Child Care Assistant													X				1
Child Care Worker											X						1
Associate Degree	12	9	17	6	25	37	11	38	17	16	22	13	26	35	5	20	309
Diploma	10	13	7	18	11	19	13	20	13	17	17	11	10	15	15	11	220
ALL PROGRAMS	22	22	24	24	36	56	24	58	30	33	39	24	36	50	20	31	529

Learning Materials – Secondary

Curriculum development activities in South Carolina focus on predetermined statewide requirements for specific job skill training. These requirements are converted, at the local level, into projected vocational courses, which will produce entry-level workers with the requisite competencies. Once the need for a particular course has been perceived, it is included in the local vocational education plan for the forthcoming fiscal year. Each proposed course must be justified by the projected employment potential for that occupation. Once the local plan is received by the Office of Vocational Education, the justification for each proposed course is reviewed to determine if it meets the requirements of the State Plan. The authorization to implement a particular course at a specific site is incorporated into the approval of the local vocational education plan by the Office of Vocational Education.

A list of approved courses within the state is maintained by the appropriate state supervisor, who ensures that instructional materials are available for each approved course within the respective service area.

Curriculum guides are developed by the Vocational Education Media Center at Clemson University, based on the specifications of the state supervisor. Upon receipt of the requirement to produce instructional materials, a search of the literature and existing materials is conducted. Existing materials are utilized or revised or new materials developed as appropriate. For programs with only a minimum number of classes being conducted, instructional materials from another source are often adopted. Draft materials are approved by the Office of Vocational Education before being replicated for use in a field test at one or more sites. A review of the field test results is conducted by the Media Center and the materials are revised accordingly. Once approved, the materials are replicated for statewide distribution and a workshop is conducted in which teachers are instructed in the use of the new materials. A similar orientation is conducted for teachers implementing a newly-approved course.

Instructional materials are revised when the need is determined by the state supervisor, who bases this decision on information gathered from classroom teachers during:

a. Staff visits by the state supervisors and district consultants

b. Program evaluation team visits

c. In-service workshops and service area conferences.

A decision was reached in 1974 to move toward the implementation of performance-based vocational education in all service areas. To support this decision the Office of Vocational Education joined the Vocational-Technical Education Consortium of States (V-TECS), which produces catalogs of performance objectives, criterion-referenced measures, and performance guides for use by member states. A V-TECS catalog is the foundation for the design of performance-based instruction for a given occupation. Conversion of a particular course to performance-based instruction is based on the receipt of the V-TECS catalog for that occupation.

Upon receipt of a new V-TECS catalog, the appropriate state supervisor forms a teacher committee to assist in the evaluation of the product. The tasks appropriate to the secondary level in South Carolina are selected and intermediary objectives are added. The tasks are clustered and then sequenced into a logical learning order and the optimum delivery method is selected. The curriculum coordinator works with the supervisor to convert these decisions into a detailed description of the desired classroom delivery package, which is sent to the Vocational Education Media Center at Clemson.

The Media Center follows a developmental procedure for classroom delivery packages similar to the method previously described for the development of instructional materials. The package for performance-based instruction usually contains specially designed learning resources, e.g., modules or learning activity packages, audio-visual aids, procedural guides for administering the criterion-referenced measures, and suggested management procedures for the control of classroom activities.

Again, a field test is conducted and the materials revised accordingly. Once approved, the package is replicated for statewide distribution. A workshop for the using teachers is conducted before implementation in the classroom.

Classroom delivery packages are revised as the need is determined by the appropriate state supervisor and the curriculum coordinator. In addition to more generalized information regarding the appropriateness of instructional materials, the inability of a number of students to perform the criterion-referenced measure is justification for the immediate review and revision of that portion of the package.

Table 44 summarizes, by type of material and service area (program area) the secondary vocational learning materials developed and published by the Office of Vocational Education through the Vocational Education Media Center at Clemson University, for the years 1967-1977. (For a description of the organization of the Office of Vocational Education and the Vocational Education Media Center, see "State Context: Organization and Governance of Vocational Education" – especially Charts 2 and 3.)

TABLE 44

INSTRUCTIONAL MATERIALS
1967 to 1977

Type of Material	SERVICE AREA								
	Agriculture	Distributive Education	Health Occupations	Home Economics	Office Occupations	Trade & Industrial	Industrial Arts	Pre-Vocational	Special Programs
V–TEC CATALOGS	4	0	0	0	2	13	0	0	0
TEACHER MATERIALS –Guides, Program Pkgs., Manuals, Handbooks, Textbooks	31	17	3	27	17	44	3	27	7
–Slides, Tapes, Transparencies	37	28	1	24	39	28	4	0	0
STUDENT MATERIALS –Modules, Progress Charts, Workbooks, Worksheets	6	0	0	2	11	3	0	0	0
SIMULATION ACTIVITIES	0	0	0	0	2	0	0	0	0
TEST AND EVALUATION MATERIAL	0	1	0	2	0	0	0	0	0
BOOKLETS, BROCHURES	6	10	1	10	5	27	0	0	0
SUPPLEMENTARY MATERIAL	11	27	0	66	11	17	2	1	1

Learning Materials – Postsecondary

The State TEC Board does not have the responsibility for the original development of instructional materials for the TEC institutions. When special grant monies have been available for the development of specific instructional materials for statewide application in TEC institutions, the State Board staff has coordinated these projects, providing consultative services in developing, editing, and publishing the materials.

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Faculty and Staff Development — Secondary

Part 1: Teacher Education

The South Carolina Department of Education provides for the preparation and training of prospective teachers and instructors of vocational education through preservice and inservice programs. Preservice courses are offered by selected colleges and universities in South Carolina. These courses are available on and off the institutions' campuses and enable students to earn credits toward an undergraduate or graduate degree. Such credits may also be applied toward teaching certificates for specific vocational program areas. Some preservice courses are designed specifically for the untrained tradesman interested in entering or re-entering the teaching profession as a trade and industrial (T & I) education instructor. The prospective T & I instructors are required to take a three-credit hour course on teaching methods and a three-credit hour vocationally-related course prior to teaching vocational education courses in the South Carolina schools.

Preservice training is provided through the following institutions in the designated service areas: Clemson University (Agriculture and Trade and Industrial Education); South Carolina State College (Home Economics and Trade and Industrial Education); University of South Carolina (Distributive Education); and Winthrop College (Distributive Education, Home Economics, and Office Occupations). Annually funds are allocated to each institution in accordance with Public Law 94-482, Subpart 3, Section 130(b)(5) and Subpart 5, Section 150(a). The budgets commonly cover all or part of expenses such as personnel (salaries and wages), fringe benefits, contractual services, supplies, equipment, other related items, and indirect costs at predetermined rates. Table 45 shows the number of teacher educator positions supported by the funds and the level of funding for each institution from FY 1975 through FY 1979.

TABLE 45 TEACHER EDUCATOR POSITIONS SUPPORTED BY VOCATIONAL EDUCATION FUNDS

Institution	Program	Teacher Educators	Funding Level — Fiscal Year				
			1975	1976	1977	1978	1979
Clemson University	Agriculture	5	66,963	66,963	66,963	66,963	77,106
	Trade & Industry	2	50,371	50,371	50,371	50,371	57,765
South Carolina State College	Home Economics	2	32,808	32,808	32,808	32,808	42,514
	Trade & Industry	1	26,208	26,208	26,208	26,208	33,827
University of South Carolina	Distributive Ed.	1	20,078	20,078	20,078	20,078	22.548
Winthrop College	Distributive Ed.	2	12,470	12,470	12,470	12,470	16,044
	Home Economics	6	43,376	43,376	43,376	43,376	43,376
	Office Occupations	1	4,677	4,677	4,677	4,677	5,883

As an extension of the institutions' degree programs, they maintain student teacher programs for prospective teachers in cooperation with local education agencies (LEA's), and provide assistance to local supervisors of student teachers.

The teacher education institutions also provide a number of support services to the Department of Education for inservice training programs, follow-up visits and assistance (on-the-job) to beginning and returning teachers, curriculum development, proposal development, youth organizations, public relations, and state planning. To public school administrators and teachers they serve as consultants.

Preservice courses are established through a complex approval process beginning with documentation of the need for a particular course, institutional approval of the course (often requiring department, college and various council or committee approvals), and Department of Education approval for certification credit.

The teacher education programs are evaluated annually by a committee appointed by the Director of the Office of Vocational Education. Semi-annual reports prepared by the head teacher educators from each institution, area vocational center directors, and district/county superintendents are reviewed and staff visits are conducted periodically.

Inservice training is designed to provide training to vocational instructors as deemed necessary by the Office of Vocational Education. The state service area supervisors are responsible for arranging and conducting workshops, seminars and conferences for vocational teachers, guidance counselors, supervisors and administrators of vocational education, to improve the quality of instruction, supervision and administration of vocational education programs, and to help overcome sex bias in the programs. The type of inservice training needed is determined through formal and informal means from vocational center directors, teachers, district consultants, and representatives from business and industry. Many times the development of new instructional materials or more effective teaching methods and techniques dictates the need for a particular type of inservice training. Inservice activities are usually evaluated or critiqued by the participants as one means of determining the quality, effectiveness, and usefulness of the training. Follow-up visits to schools are conducted by district consultants and other Department of Education personnel to ensure proper implementation and use of methods, techniques and products presented during training sessions.

Table 46 shows the enrollment for preservice and inservice training by service area, ancillary, and special programs, and the number of bachelor's and master's degrees awarded, by service area, as reported in the "South Carolina State Plan for Vocational and Technical Education" from FY 1973 to FY 1977.

TABLE 46

VOCATIONAL EDUCATION PERSONNEL PREPARATION AND DEVELOPMENT

											Degrees Awarded										
	Pre-Service					In-Service					Bachelors					Masters				
Vocational Education Programs	1972	1973	1974	1975	1976	1972	1973	1974	1975	1976	1972	1973	1974	1975	1976	1972	1973	1974	1975	1976
Unduplicated TOTAL	331	432	270	740	853	1260	1519	1782	1312	1413	197	287	180	159	123	48	65	48	55	77
Agriculture	20	23	17	55	54	132	167	208	75	78	21	31	17	14	12	10	10	12	12	14
Distributive Education	15	18	19	90	92	49	92	80	190	87	20	18	20	28	21	2	4	3	7	9
Health	86	1	4	5	8	17	50	50	40	42										
Consumer & Homemaking	50	50	54	200	205	238	240	240	270	280	60	97	79	58	35	17	10	5	9	22
Homemaking (Gainful)	–	–	11	12	12	23	12	12	44	45										
Office Occupations	70	75	22	80	165	245	266	425	61	194	27	44			15		16			10
Trades/Industry (Ind. Ed.)	60	235	116	140	150	330	290	360	397	410	69	97	64	59	40	19	25	28	26	22
Other																				
Pre-Vocational	–		10	140	146	162	327	327	150	160										
Industrial Arts	–																			
Ancillary																				
Administration			8	9	10	40	45	42	40	90										
Guidance & Counseling	30		9	9	12	24	30	38	45	45										
Para-professional		30																		
Special Programs (Duplicated)																				
Cooperative - Part G		5	4	6		28	23	23	12	10										
Disadvantaged			14	16	16	86	45	51	50	48										
Handicapped			10	10	12	73	28	34	35	36										
Remedial																				
Exemplary																				
Other																				
TOTAL		5	28	32	28	187	96	108	97	93										

Part 2: Staff Development

According to the State Plans prior to and including FY 1978, there has been no formal policy or plan for staff development for personnel in the Office of Vocational Education. Despite this fact, some opportunities were provided and training took place through national and state conferences and periodic intra-office workshops or training sessions conducted at the discretion of the Department of Education's Personnel Director and the Director of the Office of Vocational Education and his Chief Supervisors. The exact number of sessions attended and participants involved was not revealed through this research.

Special federal programs have also provided for inservice and preservice training. Public Law 90-576, Part F, Section 552 and Public Law 94-482, Part B, Subpart 2, Section 172 were designed "to provide opportunities for experienced vocational educators to spend full-time in advanced study of vocational education for a period not to exceed three years in length." From FY 1970 to FY 1979, eighteen vocational educators in South Carolina participated in this program, two of whom were Department of Education employees who received master's degrees in vocational education.

Section 553 of Public Law 90-576, Part F was designed "to pay the cost of carrying out cooperative arrangements for the training or retraining of experienced vocational education personnel such as teachers, teacher educators, administrators, supervisors, and coordinators, and other personnel in order to strengthen education programs...." Past records do not reveal the number of staff members that have participated in this program.

Faculty and Staff Development — Postsecondary

In 1975, the State Board for Technical and Comprehensive Education approved a statewide policy on faculty and staff development for all personnel employed by TEC colleges and centers and the TEC Central Office. This policy allowed participation in eight areas of professional development, with the Central Office providing 50% incentive funds and each institution providing 50% matching funds for their personnel.

The eight areas of activity were:

(1) Postsecondary Education

(2) Short Courses On-Campus

(3) Workshops/Seminars/Conferences/Institutes — On-Campus

(4) Workshops/Seminars/Conferences/Institutes — Off-Campus

(5) Professional Societies

(6) Educational Field Trips

(7) Faculty and Staff Development Resource Center

(8) Educational Leave

According to reports provided to the TEC Central Office, a total of 67 Diversified Activity Units (DAU's) were conducted for faculty and staff development during the 1975-76 school year by the TEC Central Office and fifteen of the sixteen TEC colleges and centers. These activities involved 3,212 employees, at a total cost of $184,122.14. During the 1976-77 school year, 53 DAU's were conducted at fourteen of the sixteen TEC colleges and centers, involving 2,071 employees at a total cost of $139,154.06.

Critical shortages of funds for school year 1977-78 forced the Central Office to suspend the incentive funding until such time as sufficient funds are available to resume it. However, the institutions have continued to participate independently in faculty and staff development programs within the constraints of their own budgets, and the TEC Central Office has likewise provided independent developmental activities for its employees.

Counseling, Guidance, and Job Placement – Secondary

The Vocational Education Act of 1976 (Education Amendments of 1976 – Public Law 94-482) specifically allocates funds which must be used by the states for vocational guidance and counseling activities. In accordance with this requirement, the South Carolina Defined Minimum Program (DMP) stipulates that vocational centers will provide guidance and counseling services to their students. Depending on the size of the student body, these services may be provided by either a full time or a part time counselor.* During 1977-78, 52 of the state's 55 vocational centers provided adequate guidance and counseling services, one was cited for providing insufficient guidance and counseling services, and two were cited for not offering these services.

No federal funds are specifically allocated for job placement services and the DMP does not require that vocational centers provide placement services. The funding policy of the Office of Vocational Education specifies that, when vocational centers employ a separate person to perform only placement and follow-up functions, they must use state and/or local funds. As might be expected, fewer than half of the vocational centers have a specific staff member designated as responsible for job placement. Latest information indicates that 12 centers have full time placement directors, four have no specific person responsible for placement and follow-up activities. It can be surmised, however, that in all 56 centers, guidance counselors, directors, assistant directors, and other staff members, as well as teachers, all play an important role in placing students and in providing follow-up information on them.

In 1969, South Carolina began a VIEW (Vital Information for Education and Work) program to help counselors provide students with local career information. This program is active in 34 states and is coordinated in South Carolina by the Vocational Research Coordinating Unit. Currently the program provides information such as job descriptions, training requirements, wages, job availability, and opportunities for promotion on more than 350 occupations in South Carolina. This information is provided by means of a combination of microfiche reader/printers and printed materials for each occupation. It is accessible to the students of 454 high schools, vocational centers, junior high schools, and middle schools throughout the state. Reinforced with assistance and advice from counselors and teachers, VIEW continues to be a valuable source of career information to South Carolina students.

Table 47 indicates the guidance and placement personnel on staff in the 56 vocational centers across the state.

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* Students in vocational programs offered through a high school or vocational wing are provided the guidance and placement services normally available at these facilities to all their students.

TABLE 47

SECONDARY VOCATIONAL GUIDANCE AND PLACEMENT STAFF

AREA VOCATIONAL CENTER (COUNTY)	GUIDANCE COUNSELOR FT	PT	PLACEMENT DIRECTOR FT	PT
Aiken County Vocational Center (Aiken)	1	—	—	—
Allendale County Vocational Center (Allendale)	—	—	—	—
Anderson County Districts 1 & 2 Vocational Center (Anderson)	1	1	—	—
R.D. Anderson Area Vocational Center (Spartanburg)	1	—	1	—
Aynor-Conway Career Center (Horry)	—	2	—	1
Barnwell County Area Vocational Center (Barnwell)	1	—	—	—
Beaufort-Jasper Career Education Center (Beaufort)	—	—	—	—
Bonneau Vocational Center (Berkeley)	—	1	—	—
Calhoun-Orangeburg Vocational Center (Orangeburg)	1	—	—	—
Career & Occupation Center (Florence)	1	—	—	—
Cherokee Area Vocational Center (Cherokee)	1	—	—	—
Chester County Area Vocational Center (Chester)	1	—	—	—
Clarendon County Area Vocational Center (Clarendon)	—	1	—	1
Colleton County Area Vocational Center (Colleton)	1	—	—	—
Cooper River Occupational Center (Charleston)	1	—	—	—
Cope Area Vocational Center (Orangeburg)	1	—	—	—
Crescent Cities Vocational Center (Aiken)	—	—	—	—
Daniel Morgan Vocational Center (Spartanburg)	1	—	1	—
Darlington Career and Manpower Center (Darlington)	1	—	—	—
Dillon County Area Vocational Center (Dillon)	1	—	—	—
Donaldson Vocational Training Center (Greenville)	1	—	1	—
Dorchester County Vocational Center (Dorchester)	1	—	—	—
Eau Claire Career Center (Richland)	1	—	—	—
Enoree Area Vocational Center (Greenville)	1	—	1	—
Fairfield County Vocational Center (Fairfield)	1	—	—	—
Finklea Career Center (Horry)	1	—	—	—
Florence Area Vocational Center (Florence)	1	—	—	—
Floyd D. Johnson Vocational Center (York)	1	—	—	—
Foothills Area Vocational Center (Greenville)	1	—	1	—
Golden Strip Vocational Center (Greenville)	—	—	—	—
Grand Strand Career Center (Horry)	1	—	—	—
Greenwood County Vocational Facilities (Greenwood)	1	—	1	—
W. Gresham Maggett Educational Occupation Center (Charleston)	1	—	—	—
Hartsville Area Vocational Center (Darlington)	1	—	—	—
Hemingway Area Vocational Center (Williamsburg)	—	—	—	—
Irmo-Chapin Career Center (Lexington)	1	—	—	—
Kershaw County Vocational Center (Kershaw)	1	—	1	—
Lancaster Vocational Education Center (Lancaster)	1	—	1	—
Laurens County District 55 Vocational Center (Laurens)	—	—	*	
Lee County Vocational Center (Lee)	1	—	—	—
Lexington 1 Area Vocational Center (Lexington)	—	—	—	—
Lower Richland Career Center (Richland)	1	—	—	—
Lynhaven Career Center (Richland)	1	—	—	—
Marion-Mullins Vocational Center (Marion)	1	—	—	—
Marlboro Area Vocational Center (Marlboro)	1	—	1	—
McDuffie Vocational High School (Anderson)	—	—	—	—
Newsberry County Vocational Center (Newberry)	—	—	—	—
Oakley Vocational Center (Berkeley)	—	1	—	—
Oconee Vocational Center (Oconee)	1	—	1	—
Pickens County Area Vocational Center (Pickens)	1	—	1	—
Rock Hill Career Development Center (York)	—	—	—	1
Sumter Counry Career Center (Sumter)	1	—	—	1
H.B. Swofford Area Vocational Center (Spartanburg)	1	—	—	—
Strom Thurmond Vocational Center (Edgefield)	—	—	—	—
Union County Vocational Center (Union)	1	—	—	—
Wilson Vocational Center (Richland)	—	—	—	—
TOTAL	40	6	12	4

*Job placement is the function of a county placement team.

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Counseling, Guidance, and Job Placement – Postsecondary

In the TEC System, counseling, guidance, and placement services are provided as parts of the general area of student services. In each institution, student services personnel are usually under the direction of a dean of students or a vice president for student affairs.

Counselors and placement coordinators generally have additional student services duties, such as admissions, recruiting, financial aid, student activities, and testing, but only one institution specifically indicates that the placement coordinator also serves as a counselor. Table 48 indicates the number of counseling and placement personnel on staff at each institution.

TABLE 48 POSTSECONDARY VOCATIONAL COUNSELING AND PLACEMENT STAFF

TECHNICAL INSTITUTION	COUNSELOR	PLACEMENT COORDINATOR
Aiken	3	1
Beaufort	4	–
Chesterfield-Marlboro	1	1
Denmark	1	1
Florence-Darlington	2	1
Greenville	9	1
Horry-Georgetown	1	1
Midlands	7	1
Orangeburg-Calhoun	4	1
Piedmont	5	1
Spartanburg	4	1
Sumter	2	1
Tri-County	5	1
Trident	7	–
Williamsburg	–	–
York	2	[*]
TOTAL	57	12

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[*] Job placement is a concern of department heads.

Advisory Committees

The Vocational Education Act of 1976 (Education Amendments of 1976 – Public Law 94-482) requires each participating state to establish a state advisory council for vocation education and provides funds specifically to support such councils. It also requires each eligible recipient receiving assistance under the Act to establish a local advisory council. Local advisory councils are to be "composed of members of the general public, especially of representatives of business, industry, and labor...." The South Carolina Advisory Council on Vocation and Technical Education serves as the state-level advisory council for secondary and postsecondary vocational education. The requirement for local advisory councils is met in the public system (secondary) by the provision of LEA (district) advisory committees. In the technical education system (postsecondary), the area commissions serve as general (institution) advisory committees, and each TEC institution also provides a separate advisory committee for each program of study.

The Vocation Education Act of 1976 specifies the general composition of state advisory councils and minimal specified duties, and states that the appointing authority shall be the Governor. The Act also provides separate authorization of funds for "the purpose of making grants to State Advisory Councils to carry out the functions specified...." Accordingly, since 1969 South Carolina has appointed qualified individuals to the Council and the Council has complied with all of the intent and specifics of the federal legislation.

The overriding concept of the establishment of state advisory councils is that they will function as autonomous bodies, carrying out certain evaluation functions and tendering advice to the State Board for Vocational Education. In South Carolina, the Board for Vocational Education is the State Board of Education. Due to the unique structure in South Carolina, the State Advisory Council also advises to the State Board for Technical and Comprehensive Education. Congress intended that the state advisory council would work to improve vocational and technical education, making such recommendations as might be warranted to help in improving the delivery system of occupational education.

In addition to its advisory role to the two state boards, the South Carolina Advisory Council has mandated relationships with other state agencies. Title X of the Educational Amendments of 1972 (Public Law 92-318) charges the Council with specific duties with respect to the State Postsecondary Education Commission. This Act has not been rescinded and its provisions are still in effect.

The 1976 Act (Public Law 94-482) also charges the Council to be responsive to and work with the State Manpower Services Council (SMSC) and implies relationships with other groups, including the State Occupational Information Coordinating Committee (SOICC).

The State Advisory Council is unique in that it performs no administrative function other than that required for its own internal administration and support. Other agencies exist for that purpose and the Council serves an advisory role to those agencies. Minimal specific responsibilities of the Council are listed below.

Another unique feature of the State Advisory Council is that the appointed members do not serve as policy approvers, but as participating members of the total Council. This results from two factors, one being limited funds for operations and the other, a need for credibility. With limited operational funds, it has been undesirable and impossible to establish a large office staff to carry out the work of the Council. Credibility increases as the Council members become an active part of the deliberative process and any resulting recommendations come from the Council rather than from a technical staff.

The State Advisory Council has a mandate to perform certain evaluating, coordinating, and advising functions, without straying into the administrative prerogatives of other boards or agencies. The Council intends to carry out these functions with efficiency, while clearly complying with the specifics and the intent of the federal act which created it.

The following list summarizes the minimal responsibilities of the South Carolina Advisory Council on Vocational and Technical Education.

RESPONSIBILITY	AUTHORITY
Advise the State Board of Education on development of the Five-Year Plan, annual program plan, and on policy matters pertaining to vocational education.	P. L. 94-482, Title II, Section 105(c), (d), (g) and Governor's Executive Order, August 18, 1972
Advise the State Board for Technical and Comprehensive Education.	P. L. 94-482, Title II, Section 105(c), (d), (g) and Governor's Executive Order, August 18, 1972
Evaluate vocational and technical education programs, services, and activities assisted under the federal legislation.	P. L. 94-482, Title II, Section 105(c), (d), (g) and Governor's Executive Order, August 18, 1972
Prepare and submit to the U.S. Commissioner of Education and to the National Advisory Council an annual evaluation report, and distribute such report.	P. L. 94-482, Title II, Section 105(c), (d), (g) and Governor's Executive Order, August 18, 1972
Conduct at least one public meeting during which the public is given an opportunity to express views concerning vocational and technical education.	P. L. 94-482, Title II, Section 105(c), (d), (g) and Governor's Executive Order, August 18, 1972
Identify the vocational education and employment and training needs of the state, and assess the extent to which vocational education and related programs represent a consistent and coordinated approach to meeting such needs.	P. L. 94-482, Title II, Section 105(c), (d), (g) and Governor's Executive Order, August 18, 1972
Comment on the reports of the State Manpower Services Council.	P. L. 94-482, Title II, Section 105(c), (d), (g) and Governor's Executive Order, August 18, 1972
Provide technical assistance on request to local vocational and technical education advisory councils on the establishment and operation of local councils.	P. L. 94-482, Title II, Section 105(c), (d), (g) and Governor's Executive Order, August 18, 1972
Fulfill similar specific responsibilities with respect to the State Postsecondary Education Commission.	P. L. 92-318, Title X, Part B, Section 1055(a) (1).

In 1977-78, each of the 92 school districts in South Carolina reported that it had complied with the requirement to "establish a local advisory council to provide [the district] with advice on current job needs and on the relevancy of courses being offered by [the district] in meeting such needs." The Act allows the districts the option of establishing the councils for "program areas, schools, communities, or regions, whichever the recipient determines best to meet the needs of that recipient," and many of the area vocational centers have established program advisory committees in addition to the district or school committees.

Fourteen of the sixteen TEC's are governed locally by area commissions which also serve as local advisory committees.* (Beaufort TEC and Denmark TEC do not have area commissions and are governed by the State Board for Technical and Comprehensive Education). However, each TEC is also required to establish an advisory committee, or craft committee, for each program of study.

All South Carolina school districts and TEC's comply with Public Law 94-482 in that they have established local advisory committees. Moreover, all TEC's and many area vocational centers have program advisory committees. What is not known, however, is how active the committees are, and how effective they are in performing their duties.

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* For a description of the governing authority and duties of the area commissions, see "State Context: Organization and Governance of Vocational Education."

Occupational Information (SOICC)

As mandated by the Education Amendments of 1976 (Public Law 94-482), South Carolina established a State Occupational Information Coordinating Committee (SOICC) on August 25, 1977. This committee is composed of the heads of four state agencies:

1. Employment Security Commission
2. State Manpower Services Council
3. State Board of Education (Office of Vocational Education)
4. Vocational Rehabilitation Department.

In addition, the State Board for Technical and Comprehensive Education and the Commission on Higher Education are represented on the committee by nonvoting members. Each of the six agencies has appointed working representatives who act in an advisory capacity to the SOICC director, who in turn reports directly to the committee.

The purpose of SOICC is to:

1. Improve coordination and communication among occupational information users and producers;
2. Develop and implement a statewide Occupational Information System to include employment demand and training opportunities.

The initial efforts of SOICC during Fiscal Year 1979 will be concentrated on the development of such an information system and its pilot testing in over 40 sites in the Columbia and Charleston metropolitan areas.

Vocational—Technical Program Articulation

The State Department of Education and the State Board for Technical and Comprehensive Education have initiated and continue efforts to articulate secondary and postsecondary vocational programs in South Carolina. In selected geographical areas, vocational and technical education administrators and instructors have worked to develop procedures for articulation between secondary level (vocational centers, high schools) and postsecondary level (TEC) programs. The state-level role has been primarily that of a catalyst, with the responsibility for implementation resting at the local level.

Articulation meetings and workshops have been held in ten geographical areas of the state during the past several years. These meetings were hosted by both vocational center directors and TEC presidents/directors. Observations indicate that progress has been made and continues at the local level to assure that students completing secondary programs are given full credit upon admission to the corresponding postsecondary programs.

In January 1977, the South Carolina Advisory Council on Vocational and Technical Education conducted a research study of the status of program articulation between vocational and technical education in South Carolina. This study concluded that nearly all of the technical education institutions and area vocational centers have begun local efforts at program articulation. This was indicated by the number of persons who expressed knowledge of and concern about articulation. It also concluded that achieving articulation apparently follows a sequence of activities, beginning with discussions among the administrators involved and followed by discussions among faculty members. Instructors of similar programs then jointly revise curriculum materials, and work out procedures for the advanced placement of transferring students. Deliberate efforts and good faith on the part of the sending and receiving institutions are necessary in this process. Under certain circumstances, adjustments may be required within both institutions.

In summary, much has already been accomplished and there is a definite trend toward even greater program articulation between vocational and technical education.

Prevocational, Industrial Arts, and Consumer and Homemaking Education

The purpose of this section is to present brief overviews of the three non-occupational program areas which are funded through and supervised by the Office of Vocational Education. Although these areas do not purport to provide occupational skills to their students, they serve important functions: prevocational education offers exploratory courses to assist students in making sound career decisions; industrial arts education offers a variety of experiences designed to introduce the student to modern-day technology; and consumer and homemaking education seeks to impart skills which will enable students to understand and cope with the complexities of modern living.

The following describes in more detail each of the program areas and provides some insight into their purpose and the makeup of the various courses offered. Table 49, which closes this section, summarizes by county the number of courses available in each area and the 1977-78 enrollment in each.

Part 1: Prevocational Education

The present vocational education program in South Carolina assumes that some students can make sound vocational choices or career decisions in or before grade eleven. Therefore, entry-level skill training begins in grades ten, eleven, and twelve or in eleven and twelve for most students. The State Department of Education, Office of Vocational Education, promotes sound exploratory vocational programs in grades nine and ten to enhance career decisions of students. These programs are designed to eliminate the possibility of several weeks of non-productive time spent in vocational courses in grades eleven and twelve by students who do not have the necessary interest or aptitudes to pursue them. To assist students in determining their occupational interests and aptitudes, the State Board of Education mandates that all schools offer prevocational education in grade nine or ten or both.

The pre-high school or early high school period in the life of a youth is a time when many individuals are basically uninformed about the "World of Work." Much of the decision-making which is carried on during this period is within a sphere of limited understanding. Therefore, prevocational education is designed to help students to explore six occupational areas, their requirements, working conditions, and benefits. The purpose of prevocational education is to influence the career development of all students in grades nine and ten and to help these students to make meaningful occupational choices.

Exposure to a variety of careers is important if individuals are to determine their interests and abilities. The prevocational program helps to meet the needs of students by providing activities that assist them in functioning as useful and productive citizens. In addition, the prevocational education program is flexible to allow for individuality and is designed to help all students to develop to their maximum potential.

The main objective of the program is to provide an opportunity for the student to explore at least six different areas of vocational instruction with emphasis on communicative, computational, and quantitative skills, and occupational information and civic responsibilities in conjunction with skill training. The specific objectives are: (1) to provide hands-on experience for students in the six occupational areas; (2) to acquaint students with the employment opportunities of the areas; (3) to assist students in determining their vocational interests and aptitudes; (4) to acquaint students with employers' expectations in each occupational area; (5) to assist students in explaining and interpreting the basic principles of our economic system; and (6) to motivate students to locate and use data pertaining to the world of work.

The Defined Minimum Program for South Carolina School Districts states that courses in prevocational education will be offered in grade nine or ten or both. Courses in prevocational education should complement skill training at vocational centers or comprehensive high schools. With the continued growth of vocational courses and increased enrollment at vocational facilities, prevocational education will play an important role in vocational education and the secondary curriculum.

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Part 2: Industrial Arts Education

Industrial arts education provides manipulative and informational experiences in the tools, machines, processes, materials, products, occupations, and organizations of the technological world in which we live. It seeks to acquaint the young with the nature, potential, and problems of a technological society.

The junior high and middle school industrial arts program offers students a variety of laboratory experiences organized to teach broad industrial understandings. Through experiences structured to include many of the management, production, and personnel practices of industry, the students study the processes, tools, materials, and products of industrial technology. The industrial arts experiences may be grouped by major industries (metal working, graphic arts), industrial materials (wood, plastics, metals), or specific industrial processes (welding, drawing, machine shop). In any case, the focus of the industrial arts course is on the function of industry.

The study of industry through exploratory experiences is the primary purpose of the junior high and middle school industrial arts courses. The industrial arts program includes opportunities for the student to experience planning, completing, and evaluating industry-related activities. Through these exploratory experiences, the students develop an understanding of today's highly industrialized world.

Industrial arts programs are designed to be innovative in their course offerings. Exploratory programs designed around broad industrial content and required of both male and female students are currently in operation. Other schools have moved to include instruction based on programs such as The World of Construction.

The major concern in organizing instructional content for the middle and junior high school industrial arts program is to provide a broad study of the industrial application of knowledge and practice, rather than concentrating only on the manipulative practices of narrowly defined industrial groups or crafts.

The industrial arts instructional program is organized to provide exploratory study of how: (1) industries are formed and managed to satisfy man's needs; (2) industries change a variety of materials in form and structure thus adding value through processes; and (3) industries deal with people as consumers, workers, and investors. The instructional content may be identified by traditional titles (drawing, woodworking, metalworking, electricity, graphic arts, plastics, and ceramics), but the program includes a minimum of four areas of instruction, and the content of these areas is selected to present not only the production practices associated with making things, but also the management tasks and personnel inducements needed for the production of goods. The manipulative activity for the industrial arts program is not predicated on the development of skill in tool use. The laboratory experiences are provided for learning the material by means of active student participation through the practical application of knowledge.

In summary, the industrial arts program for the middle or junior high school is organized to include experiences involving a broad base of industrial activities utilizing a variety of processes, tools, materials, and personal relationships. The learning situation is based in a laboratory capable of dealing with a variety of individual and group learning experiences.

The industrial arts curriculum in the senior high school contributes greatly to the overall educational program as it relates to the functions, technology, and occupational opportunities of our modern industrial society. It provides feeedom for the study and exploration of the aspects of industry as they relate to the industrial and consumer use of products, thereby enabling the student to see and experience the broad realm of industrial processes in modern industry.

The high school industrial arts curriculum should provide adequate basic instruction to meet the needs of all students: (1) college-bound students; (2) students exploring more deeply the vocational cultural, and consumer aspects of American industry; (3) students planning to pursue advanced study and careers in areas based on and relating to the applied or technical sciences; and (4) students who will be entering the labor force prior to or immediately following graduation. To satisfy this demand, the industrial arts program should provide practical situations dealing with the industrial world of work and promoting the development of an understanding of the industrial dimension of our society.

The senior high school industrial arts instructional program is organized within a "general laboratory" (a variety of instructional areas) or the "unit laboratory" (structured to study one industrial material or industrial process). Either organization includes instruction directed toward the current industrial utilization of the processes studied. A minimum of four subject areas are included for in-depth study.

Part 3: Consumer and Homemaking Education

The primary goal of consumer and homemaking education is to help individuals and families improve their home environment and family life. The instructional program emphasizes helping individuals to develop skills for homemaking, meeting the changing career patterns of men and women, satisfying the demands of current societal needs, and preparing students for the combined roles of homemaker and wage earner.

The Basic Consumer and Homemaking course is designed for students at the ninth grade level and the Advanced course for students at the tenth grade level. Basic is a prerequisite for Advanced. They are one-year, multi-sex oriented, comprehensive courses which emphasize study in seven basic areas of home economics and focus on the essential tasks of rearing children and providing families with food, clothing, and shelter. The Basic and Advanced courses help to prepare students for the vocation of homemaking. They further help them to understand the complexities of family resources and family relationships.

Semester courses are provided in each of the homemaking areas for specialization according to identified needs within a school's program. All semester courses are offered on two levels, the first of which is a prerequisite for the second. Courses are designed for male and female students and are recommended for grades ten, eleven, and twelve.

The semester course in Child Development is a study of prenatal development and care, and of the social, physical, mental, and emotional development and care of the young child. As students learn these aspects of child development, their ability to deal with the problems that arise in caring for children increases. Learning experiences are planned which involve guided observation and participation with young children to prepare students for parental roles and responsibilities.

Clothing and other products made of textile materials are a significant part of daily life. Selection and use based on an understanding of the nature and characteristics of clothing products are basic to achieving the greatest consumer satisfaction. Two semester courses in Clothing and Textiles are offered for students in grades ten, eleven, and twelve.

The study of Consumer Education is designed to help students formulate their own value systems, develop sound decision-making procedures based upon their values, evaluate alternatives in the market place to get the best buys for their money, and understand their rights and responsibilities as consumers. Management and Consumer Education can enhance the quality of home and family life.

The course in Family Life Education Emphasizes the study of the family as the basic unit of society. New patterns of living that have emerged as a result of technological, cultural, societal, and economic changes are dealt with. Students gain skills in dealing with the problems of early marriage, young parenthood, three-generation families, physical mobility, changing roles of family members, and dual responsibilities of wage earners. Family Life Education makes valuable contributions in the fields of human relationships and the management of resources to achieve individual and family goals.

The Foods and Nutrition course emphasizes the important role foods and nutrition play in the health of individuals. The effects of one's dietary habits on appearance, strength, resistance to disease, personality, mental performance, and length of life are dealt with. Skills in food management and meal planning competencies are developed.

Housing and Home Furnishings is a course designed to broaden the understanding of youth in the selection, financing, care, and use of housing, home furnishings, and equipment. It provides experiences needed in making choices, decisions, and investments in housing. The course includes the identification of various types of housing, exterior and interior materials, furnishings, and the development of skills in upholstering, drapery making, and other construction techniques.

The Human Sexuality course enables students to develop the ability to recognize and understand their own feelings concerning human sexuality. Realistic applications of the knowledge of maturation and reproduction aid course participants in planning for and reaching maximum potentials in life.

TABLE 49

Prevocational, Industrial Arts, and Consumer and Homemaking Education
Courses Available and Enrollment
By County, 1977-78

	Prevocational		Industrial Arts		Consumer and Homemaking	
County	Courses	Enrollment	Courses	Enrollment	Courses	Enrollment
Abbeville	1	68	–	–	9	435
Aiken	2	905	4	465	12	1,439
Allendale	1	98	1	109	6	259
Anderson	3	782	5	450	12	1,503
Bamberg	3	214	1	22	3	176
Barnwell	2	156	1	22	9	428
Beaufort	2	357	2	103	11	562
Berkeley	3	639	–	–	14	1,432
Calhoun	2	61	–	–	13	314
Charleston	3	1,369	4	555	15	2,956
Cherokee	1	115	4	219	7	231
Chester	2	409	–	–	9	408
Chesterfield	1	218	–	–	11	571
Clarendon	2	260	–	–	9	552
Colleton	2	248	3	88	8	617
Darlington	2	276	3	147	9	808
Dillon	2	295	–	–	8	474
Dorchester	2	166	–	–	11	583
Edgefield	2	225	3	90	7	278
Fairfield	1	226	–	–	5	295
Florence	2	783	4	265	11	1,296
Georgetown	3	573	1	22	7	501
Greenville	3	1,442	4	737	14	2,502
Greenwood	2	398	2	162	8	546
Hampton	2	124	–	–	6	196
Horry	2	742	2	55	12	943
Jasper	2	85	1	50	9	218
Kershaw	2	240	–	–	8	379
Lancaster	2	330	1	69	9	531
Laurens	1	327	1	49	7	543
Lee	2	165	–	–	10	453
Lexington	2	966	4	318	13	1,411
McCormick	1	76	1	11	6	196
Marion	1	229	1	121	11	541
Marlboro	2	453	1	15	9	615
Newberry	2	269	–	–	11	506
Oconee	2	259	1	104	13	839
Orangeburg	2	383	3	98	12	1,692
Pickens	2	244	2	235	12	704
Richland	2	2,180	4	1,151	13	2,322
Saluda	3	132	4	31	5	184
Spartanburg	2	1,457	4	1,123	12	1,985
Sumter	2	562	4	492	11	1,191
Union	2	380	–	–	7	421
Williamsburg	1	300	1	18	14	690
York	3	648	–	–	9	778
Special Institutions	1	14	1	3	6	79
TOTAL	92	20,848	78	7,399	453	36,583

Adult Vocational Education

Adult vocational programs administered by the State Board of Education, through the Office of Vocational Education, include Adult Health Occupations (Diploma) programs and Vocational Adult Education (Certificate) programs, which are offered in several program areas.

Adult Health Occupations (Diploma) programs are subject to review and accreditation by appropriate licensing agencies and certification boards, such as the State Board of Nursing. Table 50 summarizes the programs available and the counties where they are offered.

TABLE 50

ADULT HEALTH OCCUPATIONS (DIPLOMA) PROGRAMS

COUNTY	DENTAL ASSISTANT	PRACTICAL NURSING (12 MO.)	PRACTICAL NURSING (PHASE II)	SURGICAL TECHNICIAN	INHALATION THERAPY TECHNICIAN	TOTAL
Aiken		X				1
Anderson	X	X		X		3
Cherokee			X			1
Chester			X			1
Darlington		X				1
Florence			X			1
Greenwood			X		X	2
Horry			X			1
Kershaw			X			1
Lancaster		X				1
Laurens		X				1
Lexington		X	X			2
Marion			X			1
Marlboro			X			1
Oconee			X			1
Pickens			X			1
Richland		X				1
Spartanburg		X	X			2
Sumter		X				1
York			X			1
TOTAL	1	9	13	1	1	25

Vocational Adult Education (Certificate) programs are offered expressly to provide job skill training, retraining, and upgrading to adults. They are offered throughout the year and, depending on the nature and scope of the training to be provided, range from a few weeks to several months in length. Adult programs are generally taught in the evenings at area vocational centers and vocational wings. Table 51, based on 1976-77 enrollment data, summarizes offerings on a statewide basis and indicates the number of adults enrolled, by course title.

TABLE 51

VOCATIONAL ADULT EDUCATION (CERTIFICATE) ENROLLMENT: 1976–77

PROGRAM AREA	COURSE TITLE	ENROLLMENT		
		TOTAL	FEMALE	% FEMALE
		7836	2230	28
Agriculture	Agriculture Production	6026	1843	
	Agriculture Supplies/Services	190	0	
	Agriculture Mechanics	838	27	
	Agriculture Products	107	63	
	Ornamental Horticulture	614	297	
	Agriculture Resources	12	0	
	Foresty	49	0	
Distributive		140	111	79
Education	General Merchandising	14	12	
	Hotel and Lodging	84	84	
	Real Estate	42	15	
Health		1329	1048	79
Occupations	Dental Assistant	23	22	
	Practical Nursing	103	103	
	Nursing Assistant	416	398	
	Medical Emergency Technician	281	80	
	Other	506	445	
Consumer and		5976	5193	87
Homemaking	Homemaking	262	225	
	Child Development	90	85	
	Clothing and Textiles	1518	1511	
	Consumer Education	77	70	
	Family Relations	67	61	
	Food and Nutrition	2631	1968	
	Housing and Home Furnishing	1331	1273	
Occupational Home		212	191	90
Economics	Food Management	197	176	
	Home Furnishings	15	15	
Office		1466	1285	88
Occupations	Accounting	239	217	
	Key Punch	77	58	
	Other Data Processing	28	0	
	General Clerical	926	838	
	Stenographic	196	172	
Trade and		5497	1246	23
Industrial	Air Conditioning	208	2	
	Body and Fender Repair	141	13	
	Auto Mechanics	788	87	
	Aviation Occupations	46	2	
	Commercial Photography Occupations	71	27	

PROGRAM AREA	COURSE TITLE	ENROLLMENT		
		TOTAL	FEMALE	% FEMALE
Trade and Industrial	Carpentry	385	55	
	Electricity	223	5	
	Masonry	463	49	
	Plumbing and Pipefitting	116	1	
	Other Construction and Maintenance Trades	22	0	
	Custodial Services	30	2	
	Drafting Occupations	140	17	
	Electronics Occupations	81	4	
	Graphic Arts Occupations	173	77	
	Instrument Maintenance and Repair	9	0	
	Machine Shop	254	8	
	Welding and Cutting	640	24	
	Cosmetology	51	51	
	Quantity Food Occupations	15	15	
	Small Engine Repair	243	5	
	Stationary Energy Sources Occupations	8	1	
	Textile Production and Fabrication	953	602	
	Upholstering	64	52	
	Woodworking Occupations	256	57	
	Other	117	90	
GRAND TOTAL		22,456	11,304	50

Handicapped and Disadvantaged Students – Secondary

Special programs are offered throughout the state for handicapped and disadvantaged secondary vocational students. The federal funds allocated to the state to support special vocational programs are dispersed through the Office of Vocational Education both to school districts and to special institutions administered through other state agencies. In fiscal year 1978, 86% of these funds went to the school districts and 14% went to the following agencies: Department of Corrections, Department of Mental Health, Department of Mental Retardation, Division of Youth Services, Opportunity School, and School for the Deaf and Blind.

The latest enrollment figures (1977-78) indicate that special students are enrolled in secondary vocational program areas as follows:

Trade and Industrial	27%
Prevocational	26
Consumer and Homemaking	17
Office Occupations	10
Agriculture	9
Industrial Arts	4
Distributive Education	3
Occupational Home Economics	3
Health Occupations	1
TOTAL	100%

Special students accounted for 15% of all secondary vocational enrollment for 1977-78; of the various program areas, they accounted for the following percentages:

Program Area	Total Enrollment	Special Students	%
Prevocational	20,848	5,659	27
Occupational Home Economics	2,676	563	21
Trade and Industrial	28,956	5,687	20
Agriculture	12,685	1,930	15
Health Occupations	1,399	214	15
Industrial Arts	7,399	941	13
Distributive Education	5,668	551	10
Office Occupations	30,743	2,150	7
TOTAL	146,957	21,363	15

While the total vocational secondary enrollment by sex in 1977-78 reflected a male-female ratio of 50% each, the ratio in special vocational programs was 59% male and 41% female.

Enrollment figures for 1977-78 indicate that 70% of all special students are mainstreamed, while 30% are served in self-contained classes. Tables 52 and 53 summarize enrollment figures for handicapped and disadvantaged students respectively, and indicate the degree to which all special vocational students are mainstreamed in South Carolina, by county and by condition. Table 54 indicates the degree to which special students are mainstreamed, by vocational program area.

TABLE 52

HANDICAPPED VOCATIONAL STUDENT ENROLLMENT (SECONDARY)
BY COUNTY BY CONDITION, 1977–78

M = MAINSTREAMED SC = SELF-CONTAINED

COUNTY	Educable Mentally Handicapped		Trainable Mentally Handicapped		Hard of Hearing		Deaf		Speech Handicapped		Visually Handicapped		Emotionally Handicapped		Orthopedically Handicapped		Learning Disability		Grand Total	Total			
	M	SC	M	SC	M	SC	M	SC	M	SC	M	SC	M	SC	M	SC	M	SC		M	%	SC	%
Abbeville	90	22	—	—	—	—	—	1	—	—	—	—	—	—	—	—	6	2	121	96	79	25	21
Aiken	—	187	—	10	—	—	—	—	—	—	—	1	—	12	—	1	—	—	211	—	—	211	100
Allendale	77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	77	77	—	—	100
Anderson	136	30	—	—	—	—	—	—	4	—	4	—	30	—	5	—	36	—	245	215	88	30	12
Bamberg	—	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16	—	—	16	100
Barnwell	24	—	—	8	9	—	—	—	7	—	9	—	3	14	2	9	2	—	87	56	64	31	36
Beaufort	18	—	—	30	2	—	—	—	1	—		—	—	—	1	1	1	—	54	23	43	31	57
Berkeley	29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	30	30	100	—	—
Calhoun	—	53	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	53	—	—	53	100
Charleston	19	80	—	—	—	—	2	—	—	—	—	—	3	—	—	—	12	38	154	36	23	118	77
Cherokee	14	21	—	—	—	—	—	—	—	—	—	—	—	10	2	—	—	—	47	16	34	31	66
Chester	96	36	2	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	137	101	74	36	26
Chesterfield	8	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	8	8	100	—	—
Clarendon	12	17	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	32	15	47	17	53
Colleton	13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13	13	100	—	—
Darlington	101	—	1	—	3	—	—	—	—	—	—	—	—	—	1	—	9	—	115	115	100	—	—
Dillon	23	14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	37	23	62	14	38
Dorchester	59	12	26	6	—	—	—	—	—	—	—	—	—	—	—	—	17	—	120	102	85	18	15
Edgefield	7	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	8	8	100	—	—
Fairfield	33	7	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	15	56	34	61	22	39
Florence	103	54	1	1	—	1	—	—	5	2	—	—	7	3	2	2	6	1	189	125	66	64	34
Georgetown	44	—	—	—	2	—	—	—	4	—	1	—	2	—	1	—	2	—	58	58	100	—	—
Greenville	48	85	—	—	—	—	—	—	—	2	3	—	4	—	—	—	8	15	162	60	37	102	63
Greenwood	106	56	—	—	2	—	—	—	—	—	—	—	26	—	4	—	8	—	206	150	73	56	27
Hampton	46	—	—	—	—	—	—	—	12	—	4	—	—	—	—	—	—	—	58	58	100	—	—
Horry	174	—	—	—	2	—	—	—	—	—	—	—	1	—	—	—	20	—	198	198	100	—	—
Jasper	5	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	5	5	100	—	—
Kershaw	74	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	74	74	100	—	—
Lancaster	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Laurens	40	—	1	—	4	—	—	—	2	—	—	—	1	—	7	—	2	—	57	57	100	—	—

COUNTY	Educable Mentally Handicapped		Trainable Mentally Handicapped		Hard of Hearing		Deaf		Speech Handicapped		Visually Handicapped		Emotionally Handicapped		Orthopedically Handicapped		Learning Disability		Grand Total	Total			
	M	SC	M	SC	M	SC	M	SC	M	SC	M	SC	M	SC	M	SC	M	SC		M	%	SC	%
Lee	65	--	--	--	--	--	--	--	14	--	--	--	17	--	--	--	7		103	103	100	--	--
Lexington	54	25	--	--	--	--	--	--	2	--	--	--	2	4	--	1	26	15	129	84	65	45	35
McCormick	--	35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	35	--	--	35	100
Marion	97	75	--	--	--	--	--	--	5	--	--	--	--	--	--	--	1	--	178	103	58	75	42
Marlboro	--	72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	72	--	--	72	100
Newberry	29	18	--	--	--	--	--	--	1	--	1	--	--	--	2	--	3	--	54	36	67	18	33
Oconee	118	4	--	--	2	--	--	--	--	--	4	--	5	--	3	1	99	8	244	231	95	13	5
Orangeburg	40	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	61	41	67	20	33
Pickens	44	--	--	--	--	--	--	--	--	--	2	--	--	--	4	--	16	--	66	66	100	--	--
Richland	140	45	--	75	1	--	--	3	--	--	--	--	3	1	--	--	21	1	290	165	57	125	43
Saluda	--	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8	--	--	8	100
Spartanburg	158	--	1	--	--	--	--	--	3	--	2	--	1	--	2	--	31	--	198	198	100	--	--
Sumter	58	--	8	--	1	--	1	--	--	--	1	--	--	--	2	--	14	--	85	85	100	--	--
Union	45	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	46	46	100	--	--
Williamsburg	54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	54	54	100	--	--
York	43	76	--	18	1	1	--	--	--	--	--	1	--	1	--	1	11	5	158	55	35	103	65
Special Institutions	--	30	--	27	--	--	98	62	--	--	57	2	--	41	--	1	--	--	318	155	49	163	51
Grand Total	3442		218		31		169		64		94		191		57		461		4727	3175	67	1552	33
Total M/SC	2344	1098	43	175	29	2	103	66	60	4	90	4	105	86	40	17	361	100	--	--	--	--	--
% M/SC	68	32	20	80	94	6	61	39	94	6	96	4	55	45	70	30	78	22	--	--	--	--	--

TABLE 53

DISADVANTAGED VOCATIONAL STUDENT ENROLLMENT (SECONDARY) BY COUNTY BY CONDITION, 1977–78

M = MAINSTREAMED SC - SELF-CONTAINED

County	Academically Disadvantaged M	Academically Disadvantaged SC	Economically Disadvantaged M	Economically Disadvantaged SC	Limited English-Speaking M	Limited English-Speaking SC	Grand Total	Total M	%	Total SC	%
Abbeville	23	—	121	—	—	—	144	144	100	—	—
Aiken	—	358	—	98	—	—	456	—	—	456	100
Allendale	205	—	—	—	—	—	205	205	100	—	—
Anderson	139	43	334	—	—	—	516	473	92	43	8
Bamberg	358	66	—	21	—	—	445	358	80	87	20
Barnwell	34	—	179	183	—	—	396	213	54	183	46
Beaufort	99	11	225	33	—	—	368	324	88	44	12
Berkeley	67	39	35	—	—	—	141	102	72	39	28
Calhoun	—	—	—	—	—	—	—	—	—	—	—
Charleston	97	38	147	85	—	—	367	244	66	123	34
Cherokee	32	103	—	—	—	—	135	32	24	103	76
Chester	86	—	735	60	—	—	881	821	93	60	7
Chesterfield	—	—	—	—	—	—	—	—	—	—	—
Clarendon	60	—	—	—	—	—	60	60	100	—	—
Colleton	—	—	—	—	—	—	—	—		—	—
Darlington	744	—	450	—	1	—	—	—		—	—
Dillon	139	25	—	—	—	—	164	139	85	25	15
Dorchester	59	37	144	—	—	—	240	203	85	37	15
Edgefield	41	—	7	—	—	—	48	48	100	—	—
Fairfield	12	188	4	58	—	—	262	16	6	246	94

County	Academically Disadvantaged M	Academically Disadvantaged SC	Economically Disadvantaged M	Economically Disadvantaged SC	Limited English-Speaking M	Limited English-Speaking SC	Grand Total	Total M	Total %	Total SC	Total %
Florence	370	216	44	—	1	—	631	415	66	216	34
Georgetown	162	—	56	—	2	—	220	220	100	—	—
Greenville	63	29	9	31	—	—	132	72	55	60	45
Greenwood	95	—	116	—	—	—	211	211	100	—	—
Hampton	177	17	—	—	—	—	194	177	91	17	9
Horry	74	41	177	60	—	—	352	251	71	101	29
Jasper	86	—	106	—	—	—	192	192	100	—	—
Kershaw	19	218	—	—	—	—	237	19	8	218	92
Lancaster	—	101	—	75	—	—	176	—	—	176	100
Laurens	97	—	—	—	—	—	97	97	100	—	—
Lee	442	18	323	100	—	—	883	765	87	118	13
Lexington	222	257	53	177	—	—	709	275	39	434	61
McCormick	—	—	—	78	—	—	78	—	—	78	100
Marion	185	126	114	35	—	—	460	299	65	161	35
Marlboro	381	72	35	102	—	—	590	416	71	174	29
Newberry	99	—	330	—	—	—	429	429	100	—	—
Oconee	121	125	108	116	—	—	470	229	49	241	51
Orangeburg	188	—	578	—	—	—	766	766	100	—	—
Pickens	172	—	49	—	—	—	221	221	100	—	—
Richland	39	224	—	20	—	—	283	39	14	244	86
Saluda	138	39	—	—	—	—	177	138	78	39	22
Spartanburg	425	40	623	—	—	—	1088	1048	96	40	4

County	Academically Disadvantaged		Economically Disadvantaged		Limited English-Speaking		Grand Total	Total			
	M	SC	M	SC	M	SC		M	%	SC	%
Sumter	5	—	120	—	2	—	127	127	100	—	—
Union	48	253	—	208	—	—	509	48	9	461	91
Williamsburg	231	—	207	—	—	—	438	438	100	—	—
York	92	87	100	—	—	—	279	192	69	87	31
Special Institution	198	158	—	308	—	—	664	198	30	466	70
GRAND TOTAL	9253		7377		6		16636	11859	71	4777	29
TOTAL M/SC	6324	2929	5529	1848	6	—	—	—	—	—	—
% M/SC	68	32	75	25	100	—	—	—	—	—	—

TABLE 54

SPECIAL STUDENTS BY PROGRAM AREA (SECONDARY)
1977–78

M = MAINSTREAMED   SC = SELF-CONTAINED

	HANDICAPPED					DISADVANTAGED					ALL SPECIAL				
	M		SC		TOTAL	M		SC		TOTAL	M		SC		TOTAL
PROGRAM AREA	NO.	%	NO.	%		NO.	%	NO.	%		NO.	%	NO.	%	
Prevocational	544	39	849	61	1393	1951	46	2315	54	4266	2495	45	3164	55	5659
Industrial Arts	72	57	55	43	127	530	65	284	35	814	602	64	339	36	941
Trade & Industrial	1052	75	352	25	1404	2772	65	1511	35	4283	3824	71	1863	29	5687
Consumer & Homemaking	590	88	84	12	674	2705	90	289	10	2994	3295	90	373	10	3668
Occupational Home Economics	110	73	41	27	151	246	60	166	40	412	356	68	207	32	563
Office Occupations	191	84	37	16	228	1820	95	102	5	1922	2011	94	139	6	2150
Agriculture	440	83	88	17	528	1354	97	48	3	1402	1794	93	136	7	1930
Distributive Education	108	100	–	–	108	381	186	62	14	443	489	100	62	0	551
Health Occupations	68	60	46	40	114	100	100	–	–	100	168	79	46	21	214
TOTAL	3175	67	1552	33	4727	11859	71	4777	29	16636	15034	70	6329	30	21363

Developmental Studies — Postsecondary

All TEC institutions provide developmental or remedial instruction to students who wish to enroll in specific occupational programs but who do not possess the level of reading, writing or mathematical skills required by the curricular programs. TEC has provided this type of instruction to students since its beginning in 1961. Twenty-five percent of TEC curriculum students require some type of developmental instruction during the academic year. The institutional developmental programs provide both instruction and counseling to aid students in succeeding in programs of their choice. Funding for developmental studies is inadequate in all institutions, and in some, students must be placed on waiting lists for remedial instruction.

Male-Female Status

This section focuses on various aspects of vocational education programs and illustrates female and male participation in these programs. Wherever possible, data have been reported for more than one year in order to illustrate any trends. The information was adapted from "Report on the Status of Males and Females in Vocational Education" which was compiled and published by Ms. Annie Winstead, State Consultant, Sex Equity, Office of Vocational Education. The primary source of the data is the BEDS (Basic Educational Data System) Reports of the South Carolina State Department of Education.

The section is divided into three parts. The first part provides information on secondary vocational education programs including enrollment, follow-up, teaching staff, and administrative staff data. The second part reviews programs on the postsecondary level, and the third part is a brief review of vocational education programs operated by the Governor's Office, Manpower Division (CETA).

Part 1: Secondary Vocational Programs

Table 55: Secondary Vocational Enrollment, by Program Area by Sex

In spite of the enactment of Title IX and Public Law 94-482, there has not been substantial crossover of students in vocational education programs nontraditional to their sex. Table 55 reflects some upward trends, but in many instances these trends do not appear to be significant.

In 1977-78, of a total vocational enrollment of 146,957 students, 73,175 (approximately 50%) are females. Female enrollment in consumer and homemaking and office occupations comprises 54,445, or 75% of all of the female enrollees in vocational education. Vocational programs continue to be divided across traditional sex-role lines.

Even among the programs that evidence increases in enrollment of the opposite sex, courses (by six-digit O. E. code) are heavily weighted toward those areas that are traditional. For example, the overall female enrollment in trade and industrial is 18%, a 2% increase over 1976-77; but the courses in which most of this increase is realized are those that traditionally have had large female enrollments (i.e., cosmetology, industrial sewing, tailoring). There is, however, a trend toward an increase in females in automotive body repair and automotive mechanics, which have been traditionally male-dominated courses. Trade and industrial courses with the most balanced enrollments are graphic communications (55% female), commercial art (53% female), and public service occupations (56% female).

None of the courses in health occupations has shown any trend over a three-year period toward attracting more males. By contrast, consumer and homemaking does show a trend toward attracting males to some courses, including foods and nutrition, housing and home furnishings, and consumer education. This trend, however, does not appear to be substantial. Occupational home economics is attracting males to its courses in institutional and home management services, food services, and clothing services. In fact, the only course that has evidenced no change over a three-year period is occupational home economics-experimental.

Agriculture has increased in female enrollment from 6% in 1975-76 to 12% in 1977-78. This increase is reflected across all agriculture courses except turf and lawn management and agricultural products.

Distributive education has always been the most balanced of all the vocational program areas. While this is true overall, there are a few courses that reflect minimal or no crossover of the opposite sex: apparel and accessories (91% female); floristry (93% female); automotive (95% male); hardware and building material (91% male); and petroleum (91% male).

Office occupations is one of the vocational program areas that has a predominance of females. The percentage of females enrolled in office occupations has remained at about the same level over the three-year period. The most balanced of the office occupations courses is data processing, which is 50% male and 50% female. All of the other courses evidence enrollments of at least 70% female except keypunching (100% female) and stenographic (96% female).

Of the 20,848 students enrolled in prevocational programs, only 4,085 (20%) are female. This percentage was unchanged from the previous year.

Local educational agencies have indicated that their greatest needs in eliminating sex bias from vocational education programs are in the following areas:

(1) Students need more information regarding jobs and life-time planning.

(2) Teachers, counselors, and administrators do not fully understand Public Law 94-482 and Title IX and the implications these have for their programs.

Based on these findings, there is an apparent need for additional affirmative steps to be taken to assure that equal access to all vocational education programs is available to all students.

TABLE 55

SECONDARY VOCATIONAL EDUCATION ENROLLMENT BY PROGRAM AREA BY SEX
COMPARISON: FY 1976, FY 1977, FY 1978

	1975-76 Enrollment				1976-77 Enrollment				2977-78 Enrollment			
Program Area	Total	Female	% Female	% Distribution of Females Among Program Areas	Total	Female	% Female	% Distribution of Females Among Program Areas	Total	Female	% Female	% Distribution of Females Among Program Areas
Agriculture	12,564	787	6	1	12,417	1,175	9	2	12,685	1,518	12	2
Distributive Education	5,261	3,172	60	4	5,268	3,281	62	5	5,668	3,515	62	5
Health Occupations	1,251	1,203	96	2	1,404	1,315	94	2	1,399	1,297	93	2
Consumer & Homemaking	35,555	31,375	88	44	36,828	31,219	85	43	36,583	30,616	84	42
Occupational Home Economics	2,207	1,714	78	2	2,184	1,716	78	2	2,676	2.055	77	3
Office Occupations	30,316	23,639	78	33	30,380	23,928	79	33	30,743	23,829	78	33
Trade & Industrial	25,399	3,963	16	6	27,195	4,498	16	6	28,956	5,213	18	7
Industrial Arts	6,292	629	10	1	5,645	677	12	1	7,399	1,047	14	1
Prevocational	22,975	4,294	19	6	21,310	4,350	20	6	20,848	4,085	20	6
TOTAL	141,820	70,776	50	100	144,531	72,684	50	100	146,957	73,175	50	100

NOTE: Totals may not add to 100% due to rounding.

Table 56: Secondary Vocational Enrollment by County by Program Area

The various school districts in South Carolina report vocational education enrollment by sex. In this table, this information has been compiled by county by program area.

Of the 46 counties, none has 50% or more female enrollment in the prevocational program, and only three report female enrollments of 40% or more. In 22 counties, the female enrollment is 20% or less.

The other vocational programs are basically divided across-sex-role lines. For example, females predominate in the areas of consumer and homemaking, health, occupational home economics, and office occupations, while males predominate in agriculture, trade and industrial, and industrial arts in virtually all counties.

TABLE 56

SECONDARY VOCATIONAL EDUCATION ENROLLMENT 1977-78 BY PROGRAM AREA BY COUNTY BY SEX

PROGRAM AREA

County	Agriculture		Distributive Education		Health Occupations		Consumer & Homemaking		Occupational Home Economics		Office Occupations		Trade and Industrial		Industrial Arts		Prevocational		TOTALS	
	Total	%F	Total	%F	Total	%F	Total	%F	Total	%F	Total	%F	Total	%F	Total	%F	Total	%F	Total *	%F
Abbeville	250	6					435	76			103	28			68	26			1,186	54
Aiken	410	36	207	67	57	95	1,439	81	62	63	1,152	82	1,069	12	465	21	905	16	5,766	50
Allendale	46	9					259	81			132	76	453	32	109	39	98	5	1.078	46
Anderson	630	13	535	61	26	88	1,503	80	88	77	1,366	75	726	25	450	9	782	17	6,106	50
Bamberg	64	19	85	53			176	77	13	100	70	90	242	17	22	27	214	24	920	41
Barnwell	158	4	85	4	31	77	428	90			240	76	201	20	22	5	156	42	1,321	56
Beaufort	100	15	72	61	32	94	562	88	88	72	717	71	345	13	103	9	357	6	2,245	53
Berkeley	281	10	212	55	27	100	1,432	82	116	96	921	86	1,104	9			639	8	4,705	52
Calhoun	223	[illegible]					314	81	48	52	34	94					61	34	780	48
Charleston	95	37	530	52	135	81	2,956	78	247	64	3,690	74	1,788	16	555	16	1,369	18	11,365	55
Cherokee	169	7	66	42	31	100	231	89	58	93	357	75	548	33	219	13	115	9	1,794	42
Chester	36	0	107	71	35	100	408	67			503	69	383	23			409	26	1,881	49
Chesterfield	295	1	131	51			571	85			661	70	355	18			218	33	2,231	52
Clarendon	401	5	35	8			552	81	36	89	138	88	238	15			260	30	1,660	46
Colleton	317	2	95	61			617	91	34	91	68	97	188	1	88	2	248	2	1,655	44
Darlington	630	20	152	68			808	75	82	68	423	83	823	19	147	29	276	34	3,341	46
Dillon	250	1	90	74	29	100	474	92	35	71	289	76	254	25			295	17	1,717	52
Dorchester	142	0	41	68			583	80	52	100	864	78	745	17			166	18	2,613	53
Edgefield	115	12	54	85			278	91			113	92	166	27	90	13	225	29	1,041	52
Fairfield	161	32	65	98	51	100	295	93	80	100	212	87	644	21			226	22	1,734	51
Florence	829	8	341	76	71	99	1,296	90	77	86	878	84	1,218	21	265	12	783	21	5,758	49
Georgetown	204	0	43	72			501	93	42	74	368	81	549	20	22	9	573	18	2,302	45

County	Agriculture		Distributive Education		Health Occupations		Consumer & Homemaking		Occupational Home Economics		Office Occupations		Trade and Industrial		Industrial Arts		Prevocational		TOTALS	
	Total	%F	Total	%F	Total	%F	Total	%F	Total	%F	Total	%F	Total	%F	Total	%F	Total	%F	Total *	%F
Greenville	1,110	13	188	44	105	88	2,502	90	172	82	2,786	81	1,667	17	737	8	1,442	17	10,709	52
Greenwood	125	20	57	63	27	100	546	83			322	68	377	20	162	7	398	13	2,014	45
Hampton	138	9	99	61			196	90			222	82	157	22			124	19	955	52
Horry	583	17	121	91	82	94	943	78	54	63	413	89	778	13	55	33	742	18	3,771	45
Jasper							218	74			270	74	23	4	50	38	85	25	777	57
Kershaw	188	21	52	86	19	100	379	82	106	72	615	75	929	34			240	21	2,528	52
Lancaster	210	9					531	95			760	73	893	17	69	0	330	41	2,793	49
Laurens	227	1	217	67			543	84			346	92	472	12	49	9	327	8	2,181	46
Lee	132	0	23	22			453	86			86	93	211	25			165	5	1,070	50
Lexington	333	14	435	66	29	86	1,411	88	17	41	2,160	74	1,513	14	318	17	966	11	7,182	50
McCormick	42	0					196	70			211	75	190	33	11	73	76	22	726	54
Marion	432	12	49	86	29	100	541	90	45	76	107	86	500	36	121	15	229	23	2,053	48
Marlboro	171	2	41	90	51	100	615	82			145	98	405	17	15	20	453	43	1,896	53
Newberry	45	0	39	72	57	98	506	81			279	82	462	23			269	37	1,657	56
Oconee	435	13	98	52	27	96	839	80	37	89	752	72	475	23	104	0	259	22	3,026	51
Orangeburg	483	26	165	68			1,692	76	129	83	766	[illegible]	1,612	21	98	7	383	25	5,193	51
Pickens	194	13			34	97	704	81	18	94	582	67	531	23	235	17	244	35	2,542	51
Richland			537	57	176	92	2,322	83	421	67	2,420	76	1,444	8	1,151	16	2,180	20	10,651	49
Saluda	91	0					184	89	37	67	20	100	92	63	31	6	132	1	587	46
Spartanburg	698	8	142	36	141	93	1,985	85	82	48	1,752	74	1,434	19	1,123	17	1,457	22	8,814	46
Sumter	457	10	259	47			1,191	88	113	89	610	85	306	7	492	4	562	21	3,990	50
Union	61	47	19	74	75	93	421	97	80	100	236	79	457	11			380	11	1,729	51
Williamsburg	370	2	12	58			690	83			476	82	172	23	18	22	300	10	2,038	51
York	310	13	169	79	16	100	778	87	142	85	859	80	782	12			648	27	3,704	52
Special Institutions	44	20			6	0	79	73	65	80	22	77	932	11	3	0	14	50	1,165	22
TOTAL	12,685	12	5,668	62	1,399	93	36,583	84	2,676	77	30,743	78	28,956	18	7,399	14	20,848	20	146,957	50

* This figure may not equal total of program area enrollments for all counties, due to students crossing county lines to attend vocational education centers.

Table 57: Secondary Vocational Follow-Up Data by Program Area

Table 57 presents completion and placement data expressed as percentages of females of the total for each program area. The "available for placement" category is derived by subtracting "status unknown" and "unavailable for placement" from total completions. "Available for placement" is composed of three categories:

(1) Employed in field trained

(2) Employed out of field trained

(3) Unemployed

It appears clear from the data that females in nontraditional areas are more likely to be unemployed than those in areas which have been traditional to their sex. The statistics reported for each year are not particularly startling, except that there appears to be a trend toward unemployment of females trained in nontraditional areas.

TABLE 57

SECONDARY VOCATIONAL EDUCATION FOLLOW-UP DATA
BY PROGRAM AREA BY SEX
COMPARISON: FY 1976, FY 1977, FY 1978

Student Completions (% Female)	Program Area: Agriculture	Distributive Education	Health Occupations	Occupational Home Economics	Office Occupations	Trade and Industrial	TOTAL
Completions							
1974-75	7	60	98	83	94	17	46
1975-76	7	62	98	81	89	17	44
1976-77	12	63	96	82	88	19	46
Available for Piacement							
1974-75	6	60	98	82	96	16	40
1975-76	4	49	98	79	93	17	40
1976-77	9	58	97	81	93	20	42
Placed in Field							
1974-75	4	58	99	81	98	17	41
1975-76	2	58	98	74	97	19	42
1976-77	5	58	97	82	95	19	42
Unemployed							
1974-75	11	87	91	91	97	32	61
1975-76	8	73	100	94	97	32	59
1976-77	22	74	100	81	93	42	63

Table 58: Secondary Vocational Enrollment by Program Area by Grade Level

The female vocational enrollment broken out by grade level reflects that 9th and 10th grade students are primarily enrolled in the consumer and homemaker, office occupations, and prevocational program areas, while 11th and 12th graders are concentrated in consumer and homemaking, office occupations, trade and industrial, and distributive education. These data are similar to the overall secondary enrollment data.

TABLE 58

SECONDARY VOCATIONAL EDUCATION ENROLLMENT 1977-78
BY PROGRAM AREA BY GRADE LEVEL BY SEX

	Grade 9			Grade 10			Grade 11			Grade 12			Grades 9 - 12		
PROGRAM AREA	Total	Female	% Female	Total	Female	% Female	Total	Female	% Female	Total	Female	% Female	Total	Female	% Female
Agriculture	3,910	525	13	3,836	325	8	2,853	347	12	2,086	321	15	12,685	1,518	12
Distributive Ed.	71	4	6	330	194	59	2,928	1,864	64	2,339	1,453	62	5,668	3,515	62
Health Occup.	11	11	100	54	44	81	554	498	90	780	744	95	1,399	1,297	93
Occup., Home Economics	210	155	74	187	139	74	1,229	947	77	1,050	814	78	2,676	2,055	77
Office Occupations	1,066	821	77	9,823	7,540	77	10,720	8,452	79	9,134	7,016	77	30,743	23,829	78
Trade & Industrial	768	122	16	3,906	625	16	15,027	2,684	18	9,255	1,782	19	28,956	5,213	18
Consumer & Homemaking	8,860	8,078	91	8,868	7,808	88	8,202	6,802	83	10,653	7,928	74	36,583	30,616	84
Prevocational	13,798	2,676	19	6,274	1,206	19	546	150	27	230	53	23	20,848	4,085	20
Industrial Arts	2,425	502	21	2,103	198	9	1,713	199	12	1,158	148	13	7,399	1,047	14
GRAND TOTAL	31,119	12,894	41	35,381	10,079	28	43,772	21,943	50	36,685	20,259	55	146,957	73,175	50

Table 59: Vocational Education Teachers, by Program Area

The sex of the teachers of vocational education courses closely parallels the sex of the students who predominate in those courses and who traditionally have been associated with those courses or programs. Table 59 breaks out these data by showing the number and percent of female teachers for each program area. In particular courses, however, there are some exceptions, as in agriculture science, which reported four female teachers. Similarly, practical nursing (phase I) reported three male teachers in 1976-77.

As previously mentioned, the prevocational courses do not provide the same exposure to both male and female students entering vocational education programs. Perhaps this can be explained by the fact that male prevocational teachers far outnumber female prevocational teachers. As reflected by the table, females comprise only 25 percent of the total prevocational teacher education staff.

TABLE 59

VOCATIONAL EDUCATION TEACHERS BY PROGRAM AREA BY SEX

	1975-76				1976-77			
Program Area	Total	Female	% Female	% Distribution of Females Among Program Areas	Total	Female	% Female	% Distribution of Females Among Programs Areas
Agriculture	514	6	1	0	489	9	2	0
Distributive Education	167	88	53	4	205	123	60	6
Health Occupations	71	69	97	3	84	74	88	3
Consumer & Homemaking	1,072	1,067	100	53	1,074	1,069	100	50
Occupational Home Economics	86	68	79	3	84	67	80	3
Office Occupations	509	509	100	26	516	516	100	24
Trade & Industrial	1,202	58	5	3	1,310	133	10	6
Industrial Arts	161	0	0	0	139	3	2	0
Prevocational	560	133	24	7	557	142	25	7
TOTAL	4,342	1,996	46	100	4,458	2,136	48	100

NOTE: Totals do not add to 100% due to rounding.

Table 60: Vocational Education Administrative Staff by Position

Table 60 shows the number of full-time and part-time administrative vocational education staff.

The most significant representation of females is in the categories of adult program coordinator and other administrator. But in these positions, the total number of positions available is small when compared to other administrative positions.

TABLE 60

VOCATIONAL EDUCATION ADMINISTRATIVE STAFF
BY POSITION BY SEX
1976-77

TITLE	FULL-TIME			PART-TIME			ALL			& Distribution of Females Among Positions*
	Total	Female	% Female	Total	Female	% Female	Total	Female	% Female	
Vocational Center Director	46	1	2	–	–	–	46	1	2	7
Assistant Director	10	0	0	1	1	100	11	1	9	7
Guidance Counselor	41	8	19	4	2	50	45	10	22	67
Job Placement Coordinator	12	0	0	4	1	25	16	1	6	7
Adult Program Coordinator	3	1	33	1	0	0	4	1	25	7
Other Administrator	2	1	50	1	0	0	3	1	33	7
TOTAL	114	11	10	11	4	36	125	15	12	100

* Total does not add to 100% due to rounding.

Part 2: Postsecondary Technical Programs

National interest and concern in equalizing vocational education opportunities between males and females is reflected by efforts in South Carolina's 16 technical education colleges and centers. Some progress may be seen in statistical data that have been reported, which reveals that, of the total 1977-78 enrollment in degree and diploma programs, 63% is male and 37% female. However, a look at specific areas of study reveals that of the seven areas, four have disproportionately large numbers of male students and one has a disproportionately large female enrollment. The other two are almost equal in male-female enrollment.

Most TEC institutions have already made verbal commitments to the concept of sex equity in vocational programs; however, they are cognizant of their dependence on a favorable employment climate in the business, industrial, and service fields of employment that TEC serves. It is essential that employment opportunities be available for females trained in career fields such as electronics, automotive mechanics, construction, and dental hygiene, and that a team effort develop between education and the employment world with mutual assurances of support between them.

Table 61: Technical Education Enrollment by Area of Study

Curricula available in the South Carolina Technical Colleges and Technical Education Centers are grouped into seven areas of study. Within most of these, each curriculum is designated as an associate degree or diploma program.

Comments relevant to male and female numbers and percentages are stated below according to each area of study as shown in Table 61.

Agriculture Technology

In several of the associate degree programs and in one diploma program, male-female ratios appear to be favorable. As assessment of recruiting and admissions activities in these programs may provide helpful information that could be used in recruiting more men or women in programs where the ratio is not as favorable.

Business Technology

As the data reveal, business technology attracts males and females in almost equal numbers. Though several programs may show an inordinate number of either sex, this condition does not necessarily establish a pattern, except for secretarial curricula. Therefore, the only programs that deserve special attention at this time are associate degree and diploma curricula in the secretarial fields.

Engineering Technology

In the engineering technologies there is a need to attract women in most all programs. Some effort has already been generated in this direction. Attracting more female students to these technologies should result in creating a new work force where a recognized need exists and where the employment climate for female employees is generally favorable.

Health Science

Except for respiratory therapy programs, participation of male students in health-related careers has been traditionally low. To reverse this trend will require support from employers in these fields. In some instances, occupational titles probably should be changed, because they have historically been associated with females and are therefore sexist.

Industrial

To attract females in most of these programs will require a lot of cooperation between industry and education. As the schools develop promotional materials and procedures to attract females, industry will have to provide appropriate employment opportunities.

Public Service

There has been a national interest in supporting female employment in the various job opportunities associated with criminal justice, which will probably result in a significant increase in the number of females enrolling in this program. Salaries for child care assistants and child care workers are very low, and since the principal breadwinner in most families is still the male, attracting men to enroll in these training programs will be difficult.

Arts and Science — Career Development Undetermined

No assessment statement is needed in these areas of study. The Arts and Science programs have favorable male-female ratios. Students designated as Career Development or Undecided are temporarily unsure of their occupational goals and are taking career exploratory courses and activities.

TABLE 61

TECHNICAL EDUCATION ENROLLMENT BY AREA OF STUDY BY SEX PROJECTED 1977-78

AREAS OF STUDY	TOTAL*	FEMALE	% FEMALE	% DISTRIBUTION OF FEMALES AMONG AREAS OF STUDY
Agricultural Technology	845	181	21	1
Business Technology	20,748	10,899	53	56
Engineering Technology	4,867	308	6	2
Health Science	3,679	3,112	85	16
Industrial	14,265	1,036	7	5
Public Service	4,411	1,406	32	7
Arts and Science	5,812	2,550	44	13
TOTAL	54,627	19,492	36	100

*Students listed as "Career Development" and "Undetermined" are not included.

Tables 62 and 63: Technical Education Administrative Staff and Faculty

Of the 16 TEC presidents and directors, none is female, and only one of the 23 vice presidents and associate directors is female. Likewise, deans and business managers are disproportionately male. On the other hand, 94% of the head librarians are female and 6% are male. The most balanced administrative staff position is the financial aid coordinator, which is 50% male and 50% female.

None of the faculty positions at TEC is 100% one sex, but some have a disproportionate representation of one sex. For example, 98% of the industrial teachers are male, and technology and public service are similarly male-dominated. The areas which have a better balance of male and female teachers are allied health, business, and general education (arts and sciences).

TABLE 62

TECHNICAL EDUCATION ADMINISTRATIVE STAFF BY POSITION BY SEX WINTER QUARTER 1978

POSITIONS	TOTAL	FEMALE	% FEMALE	% DISTRIBUTION OF FEMALES AMONG POSITIONS
President/Director	16	0	0	0
Vice President/Associate Director	23	1	4	2
Dean	52	2	4	5
Business Manager	17	5	29	12
Financial Aid Coordinator	16	8	50	19
Coordinator of Veterans Affairs	16	4	25	10
Director of Admissions	16	5	31	12
Head Librarian	18	17	94	40
TOTAL	174	42	24	100

TABLE 63

TECHNICAL EDUCATION FACULTY BY INSTRUCTIONAL DIVISION BY SEX WINTER QUARTER 1978

INSTRUCTIONAL DIVISION	TOTAL	FEMALE	% FEMALE	% DISTRIBUTION OF FEMALES AMONG INSTRUCTIONAL DIVISIONS
Allied Health	141	109	77	27
Business	197	117	59	29
General Education; Arts & Sciences	301	161	53	40
Industrial	241	6	2	1
Technologies	183	11	6	3
Public Service	33	1	3	0
TOTAL	1,096	405	37	100

Tables 64 through 66 present data on the CETA program in South Carolina. The enrollment data (Table 64) reflect that distributive education, health occupations, and office occupations are virtually all female. Among specific programs, 18 were 100% representative of one sex; twelve of these were all female and six were all male.

The administrative staff data (Table 65) show an almost perfect inverse relationship of those job categories that females dominate and those that males dominate. For example, the lowest grades for the central staff, 8 through 20, are 100% female, while grades 27 through 32 are 100% male. Similarly, the lowest grades for regional staff, 9 through 16, are 100% female, while grades 19 through 23 have 50% or higher male representation.

The CETA teaching staff data (Table 66) shows that health occupations, office occupations, and developmental education are almost exclusively female, and trade and industrial is 98% male. Only distributive education shows a balance of male-female representation.

These three tables indicate that females are almost categorically represented in those programs that are traditional to that sex. This pattern is similar to those reflected by the secondary and postsecondary data.

TABLE 64

CETA (VOCATIONAL EDUCATION) ENROLLMENT BY PROGRAM AREA BY SEX FY 1977

PROGRAM AREA	TOTAL	FEMALE	% FEMALE	% DISTRIBUTION OF FEMALES AMONG PROGRAM AREAS*
Distributive Education	51	51	100	8
Health Occupations	104	102	98	15
Office Occupations	118	115	97	17
Trade and Industrial	386	16	4	2
Developmental Education	536	311	58	47
Specialized Training	157	65	41	10
TOTAL	1,352	660	49	100

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*Total does not add to 100% due to rounding.

TABLE 65

CETA (VOCATIONAL EDUCATION) ADMINISTRATIVE STAFF BY GRADE BY SEX FY 1977

CENTRAL STAFF

GRADE	TOTAL	FEMALE	% FEMALE
8	1	1	100
9	1	1	100
12	2	2	100
16	2	2	100
20	1	1	100
26	3	1	33
27	1	0	0
29	1	0	0
32	1	0	0
TOTAL	13	8	62

REGIONAL STAFF

GRADE			
9	4	4	100
10	9	9	100
12	8	8	100
16	1	1	100
19	26	13	50
21	2	1	50
22	3	0	0
23	14	1	7
TOTAL	67	37	55

TABLE 66

CETA (VOCATIONAL EDUCATION)TEACHERS
BY PROGRAM AREA BY SEX
FY 1977

PROGRAM AREA	TOTAL	FEMALE	% FEMALE	% DISTRIBUTION OF FEMALES AMONG PROGRAM AREAS
Distributive Education	8	4	50	5
Health Occupations	19	19	100	25
Office Occupations	21	20	95	26
Trade and Industrial	41	1	2	1
Developmental Education	39	32	82	42
Specialized/Other	7	1	14	1
TOTAL	135	77	57	100

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OUTPUT VARIABLES

Graduate Follow-up – Secondary

Currently, all vocational program completers and leavers with marketable skills are surveyed by contacting high schools and area vocational centers in February for information on the completers of the previous school year. Schools report under the following categories:

1. Status Unknown
2. Unavailable for Placement
    - A. Continuing Education
        1. Four-year College
        2. Junior College
        3. Postsecondary Technical Institution (two-year)
        4. Other School
    - B. Other Reasons
        1. Armed Forces
        2. Homemaker
        3. Other
3. Available for Placement
    - A. Employed in Field Trained
    - B. Employed Out of Field Trained
    - C. Unemployed

Teachers are the primary source of information for placement reporting. No attempt is made to verify the accuracy of the reports. Schools are encouraged to maintain a 50% placed in field trained ratio (to those available for placement) for continued approval of each program.

Table 67 summarizes, by county by program area, the following information on 1976-77 secondary vocational completers: number of completers; number available for placement; number placed in field trained; and the percentage of those available for placement who were placed in field trained. Table 68 summarizes similar information for the adult health occupations program completers of 1976-77.

Under the proposed National Vocational Education Data System (VEDS), the employer-based placement follow-up survey of vocational program completers mandated by the Education Amendments of 1976 (Public Law 94-482) will be implemented for school year 1978-79 completers. This survey will consist of information collected from schools, students, and employers. The survey universe comprises all secondary, postsecondary, and long-term adult (500 contact hours or more per year) program completers and leavers. A 20% sample will be selected from this universe.

Initially, schools will be contacted for student base data which consist of:

1. Name
2. Address
3. Race
4. Sex
5. Instructional Program
6. Handicap Status
7. Instructional Level
8. Completion Status

Those students reported as placed in field trained will be contacted for:

1. Education Status
2. Employment Status
3. Name and Address of Employer/Supervisor
4. Job Title
5. Job Duties
6. Job Relatedness to Training
7. Salary
8. Evaluation of Vocational Training
9. Authorization to Contact Employer

Employers of those students who give authorization will be contacted for:

1. Ratings on employee technical knowledge, work attitude, and work quality
2. Overall rating of employee vocational training
3. Overall rating of employee

The survey will be required annually and will be conducted each February.

TABLE 67

PLACEMENT OF 1976-77 SECONDARY VOCATIONAL PROGRAM COMPLETERS BY COUNTY BY PROGRAM AREA

	Agriculture				Distributive Education				Health Occupations				Occupational Home Economics			
	Completions	Available for Placement	Placed in Field Trained	% Placed in Field Trained	Completions	Available for Placement	Placed in Field Trained	% Placed in Field Trained	Completions	Available for Placement	Placed in Field Trained	% Placed in Field Trained	Completions	Available for Placement	Placed in Field Trained	% Placed in Field Trained
Abbeville	28	22	9	41	–	–	–	–	–	–	–	–	71	8	1	12
Aiken	101	49	29	59	100	59	37	63	28	1	0	0	121	49	19	39
Allendale	4	2	2	100	–	–	–	–	–	–	–	–	–	–	–	–
Anderson	95	43	24	56	172	97	50	52	12	12	12	100	6	–	–	–
Bamberg	37	7	6	86	55	18	9	50	–	–	–	–	–	–	–	–
Barnwell	42	17	3	18	23	7	3	43	2	–	–	–	–	–	–	–
Beaufort	79	22	6	27	42	17	9	53	–	–	–	–	17	–	–	–
Berkeley	54	25	14	56	89	27	11	41	13	4	0	0	51	21	5	24
Calhoun	63	5	0	0	–	–	–	–	–	–	–	–	–	–	–	–
Charleston	38	2	0	0	225	69	48	70	31	12	1	8	155	27	16	59
Cherokee	14	5	4	80	19	11	10	91	23	3	1	33	20	8	2	25
Chester	12	8	3	38	45	28	24	86	3	1	0	0	–	–	–	–
Chesterfield	138	66	41	62	52	33	16	48	–	–	–	–	–	–	–	–
Clarendon	126	44	37	84	11	5	3	60	–	–	–	–	60	17	11	65
Colleton	54	6	1	17	43	1	1	100	–	–	–	–	6	5	2	40
Darlington	100	44	29	66	27	8	6	75	6	6	6	100	42	19	3	16
Dillon	54	34	27	79	32	23	7	30	10	4	3	75	12	5	1	20
Dorchester	107	53	12	23	–	–	–	–	–	–	–	–	34	6	3	50
Edgefield	22	18	4	22	10	5	0	0	–	–	–	–	–	–	–	–
Fairfield	29	24	4	17	34	15	8	53	26	22	11	50	–	–	–	–
Florence	69	43	26	60	105	41	12	29	49	–	–	–	65	28	4	14
Georgetown	34	22	13	59	–	–	–	–	–	–	–	–	21	11	1	9
Greenville	282	112	57	51	93	61	36	59	95	51	22	43	190	49	18	37
Greenwood	19	3	1	33	40	8	8	100	39	5	2	40	11	9	9	100
Hampton	12	8	4	50	33	2	2	100	–	–	–	–	24	–	–	–
Horry	155	63	38	60	47	26	19	73	33	10	4	40	99	30	26	87
Jasper	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

TABLE 67

PLACEMENT OF 1976-77 SECONDARY VOCATIONAL PROGRAM COMPLETERS BY COUNTY BY PROGRAM AREA (Continued)

	Agriculture				Distributive Education				Health Occupations				Occupational Home Economics			
	Completions	Available for Placement	Placed in Field Trained	% Placed in Field Trained	Completions	Available for Placement	Placed in Field Trained	% Placed in Field Trained	Completions	Available for Placement	Placed in Field Trained	% Placed in Field Trained	Completions	Available for Placement	Placed in Field Trained	% Placed in Field Trained
Kershaw	27	16	13	81	14	7	7	100	20	4	2	50	32	13	7	54
Lancaster	29	17	14	82	–	–	–	–	–	–	–	–	–	–	–	–
Laurens	2	2	1	50	63	34	19	56	12	–	–	–	–	–	–	–
Lee	121	46	2	4	13	5	2	40	–	–	–	–	17	11	0	0
Lexington	29	18	10	56	121	72	59	82	19	9	4	44	–	–	–	–
McCormick	15	4	0	0	–	–	–	–	–	–	–	–	–	–	–	–
Marion	115	37	11	30	20	13	10	77	22	20	15	75	–	–	–	–
Marlboro	9	5	4	80	11	6	3	50	30	15	6	40	–	–	–	–
Newberry	26	13	6	46	48	17	12	71	–	–	–	–	–	–	–	–
Oconee	92	39	19	49	27	8	6	75	13	1	0	0	61	3	2	67
Orangeburg	179	46	33	72	77	17	11	65	–	–	–	–	58	10	4	40
Pickens	57	22	6	27	–	–	–	–	28	23	13	56	16	12	6	50
Richland	–	–	–	–	202	99	63	64	38	7	5	71	153	63	40	63
Saluda	16	8	6	75	–	–	–	–	–	–	–	–	12	12	4	33
Spartanburg	133	86	43	50	77	43	39	91	100	31	13	42	172	61	24	39
Sumter	105	39	23	59	66	29	23	79	–	–	–	–	67	23	15	65
Union	–	–	–	–	–	–	–	–	20	6	5	83	47	22	4	18
Williamsburg	89	31	12	39	–	–	–	–	–	–	–	–	–	–	–	–
York	43	30	16	53	68	43	8	19	21	1	0	0	35	21	9	43
State Total	2,855	1,206	613	51	2,104	934	581	61	693	248	125	50	1,675	543	236	44

TABLE 67

PLACEMENT OF 1976-77 SECONDARY VOCATIONAL PROGRAM COMPLETERS BY COUNTY BY PROGRAM AREA (Continued)

	Office Occupations				Trade & Industrial				Total			
	Completions	Available for Placement	Placed in Field Trained	% Placed in Field Trained	Completions	Available for Placement	Placed in Field Trained	% Placed in Field Trained	Completions	Available for Placement	Placed in Field Trained	% Placed in Field Trained
Abbeville	34	15	1	7	16	10	1	10	149	55	12	22
Aiken	309	155	99	64	251	166	90	54	910	479	274	57
Allendale	8	4	2	50	93	42	37	88	105	48	41	85
Anderson	299	94	58	62	251	161	89	55	835	407	233	57
Bamberg	9	2	2	100	60	20	12	60	161	47	29	62
Barnwell	50	8	7	88	59	24	5	21	176	56	18	32
Beaufort	289	32	7	22	99	26	9	35	526	97	31	32
Berkeley	149	36	30	83	275	131	74	56	631	244	134	55
Calhoun	–	–	–	–	–	–	–	–	63	5	0	0
Charleston	493	112	73	65	496	192	112	58	1,438	414	250	60
Cherokee	66	36	18	50	151	96	41	43	293	159	76	47
Chester	55	31	19	61	77	55	24	44	192	123	70	57
Chesterfield	121	40	22	55	116	76	33	43	427	215	112	52
Clarendon	39	16	10	62	135	65	36	55	371	147	97	66
Colleton	24	12	9	75	83	38	17	45	210	62	30	48
Darlington	64	27	17	63	310	124	63	51	549	228	124	54
Dillon	45	17	10	59	84	42	28	67	237	125	76	61
Dorchester	76	39	22	56	241	126	70	56	458	224	107	48
Edgefield	16	7	4	57	86	59	11	19	134	89	19	21
Fairfield	43	21	6	29	120	72	55	76	252	154	84	54
Florence	170	56	31	55	277	100	72	72	735	268	145	54
Georgetown	76	25	18	72	163	60	19	32	294	118	51	43
Greenville	298	123	85	69	634	362	196	54	1,592	757	414	55
Greenwood	127	23	12	52	127	79	63	80	363	127	95	75
Hampton	30	9	8	89	42	25	10	40	141	44	24	54
Horry	169	60	35	58	381	191	103	54	884	381	225	59
Jasper	10	2	2	100	–	–	–	–	10	2	2	100

TABLE 67

PLACEMENT OF 1976-77 SECONDARY VOCATIONAL PROGRAM COMPLETERS BY COUNTY BY PROGRAM AREA (Continued)

	Office Occupations				Trade & Industrial				Total			
	Completions	Available for Placement	Placed in Field Trained	% Placed in Field Trained	Completions	Available for Placement	Placed in Field Trained	% Placed in Field Trained	Completions	Available for Placement	Placed in Field Trained	% Placed in Field Trained
Kershaw	54	30	18	60	197	116	86	74	344	186	133	72
Lancaster	127	63	25	40	232	162	108	67	388	242	147	61
Laurens	56	26	11	42	116	73	43	59	249	135	74	55
Lee	35	10	2	20	106	63	25	40	292	135	31	23
Lexington	201	117	96	82	461	263	180	68	831	479	349	73
McCormick	8	1	1	100	44	18	10	56	67	23	11	48
Marion	61	28	14	50	248	153	82	54	466	251	132	53
Marlboro	58	34	16	47	133	95	41	43	241	155	70	45
Newberry	52	23	13	56	122	69	34	49	248	122	65	53
Oconee	128	39	17	44	145	117	99	85	466	207	143	69
Orangeburg	120	27	14	52	359	174	99	57	793	274	161	59
Pickens	101	36	22	61	152	102	60	59	354	195	107	55
Richland	253	106	79	74	327	182	99	54	973	457	286	63
Saluda	19	8	1	12	49	21	15	71	96	49	26	53
Spartanburg	470	157	117	74	576	389	241	62	1,528	767	477	62
Sumter	109	46	33	72	154	82	60	73	501	219	154	70
Union	42	13	8	62	129	68	50	74	238	109	67	61
Williamsburg	144	29	8	28	41	23	2	9	274	83	22	26
York	88	39	32	82	178	101	78	77	433	235	143	61
State Total	5,195	1,834	1,134	62	8,396	4,613	2,682	58	20,918	9,398	5,371	57

TABLE 68

PLACEMENT OF 1976-77 ADULT HEALTH OCCUPATIONS PROGRAM COMPLETERS BY COUNTY

County	Completions	Available for Placement	Placed in Field Trained	Percent Placed in Field Trained
Aiken	20	17	12	71
Anderson	41	33	29	88
Cherokee	10	9	9	100
Chester	11	9	9	100
Darlington	6	6	6	100
Florence	18	18	18	100
Greenwood	18	16	15	94
Horry	14	1	1	100
Kershaw	9	9	9	100
Lancaster	14	14	14	100
Laurens	12	12	12	100
Lexington	10	10	10	100
Marion	15	15	14	93
Marlboro	11	11	11	100
Oconee	15	12	11	92
Pickens	11	11	10	91
Richland	19	18	18	100
Spartanburg	51	46	44	96
York	12	9	6	67
Total	317	276	258	93

Graduate Follow-up — Postsecondary

The State Board for Technical and Comprehensive Education reports follow-up information on completers which is similar to that reported by the Office of Vocational Education. However, the method used to gather the information consists of a sampling of program completers rather than indirect contact with all students through the teachers.

Table 69 summarizes, by area of study,* statewide follow-up data on 1976-77 TEC program completers.

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*This information is reported to the U.S. Office of Education by the same program nomenclature used for secondary completers. Therefore, the areas of study shown here do not correlate directly with those appearing elsewhere for the postsecondary system.

TABLE 69

PLACEMENT OF POSTSECONDARY VOCATIONAL PROGRAM COMPLETERS BY AREA OF STUDY: 1976-77

Area of Study	Completions	Available for Placement	Placed in Field Trained	Percent Placed in Field Trained
Agricultural Production	122	117	82	70
Distribution	454	410	247	60
Health	960	898	754	84
Home Economics (Occupational Preparation)	47	41	27	66
Office	1,830	1,656	997	60
Technical	1,132	1,033	715	69
Trades and Industry	2,145	1,983	1,260	64
Total	6,690	6,138	4,082	67

CHAPTER I

INTRODUCTION

Vocational education programs in South Carolina are presently being provided at both the secondary and post-secondary levels. In the past secondary vocational programs were taught in the high schools located throughout the state. The programs in these schools represented the older approach to vocational education and, as has occurred in many other states, became known as places where students who were unsuccessful in academic programs were shunted. In order to provide better vocational education programs for students in South Carolina, a system of 55 area vocational centers is now in operation. These vocational centers have no student population of their own (with the exception of McDuffie Comprehensive High School in Anderson) but serve vocational students from two or more feeder high schools. In addition to the 55 vocational centers, there are 216 high schools offering vocational instruction. State level coordination of the secondary vocational system in South Carolina is the responsibility of the State Board of Education which implements its policies through the State Department of Education.

Post-secondary vocational education is provided by a system of 16 Technical Education Institutions (TECs) located across the state. The TEC Colleges and Centers are coordinated by the State Board for Technical and Comprehensive Education and range from enrollments of 400 students at Williamsburg to over 10,000 (including day, evening, and part time students) at Greenville. The TEC campuses are located so that they are within easy commuting distance of a majority of South Carolinians.

The opinion survey of vocational education in South Carolina, reported in this document, was conducted pursuant to Public Law 94-482. The amendments to this law require that the state plan for vocational education be based on a needs assessment.

The present state five-year-plan specifies the mission of vocational education:

> The mission of agencies in South Carolina which provide vocational training is to effectively and efficiently utilize all available resources in South Carolina so that persons of all ages in all communities of the State, those in high school, those who have completed or discontinued their formal education and are preparing to enter the labor market, those who have already entered the labor market, but need to upgrade their skills or learn new ones, those with special education handicaps, and those in post-secondary schools, will have ready access to vocational training or retraining which is of high quality, which is realistic in the light of actual or anticipated opportunities for gainful employment, and which is suited to their needs, interests, and ability to benefit from such training.

The information gathered in this needs assessment focuses on the major goals specified in the state plan for achieving this mission. These major goals are:

(1) Appropriate pre-vocational education opportunities shall exist for all ninth and/or tenth grade students in the State.

(2) Appropriate vocational education opportunities shall exist for 100% of all secondary students in the State who choose it.

(3) Appropriate opportunities shall exist for vocational/ technical education for post-secondary students in the State.

(4) Appropriate opportunities in vocational education shall exist for out-of-school youth in the State.

(5) Appropriate vocational education opportunities shall exist for adults of the State to be re-trained or to upgrade job skills.

(6) Appropriate vocational education opportunities shall exist to meet the needs of the handicapped and the disadvantaged citizens of the State.

(7) Innovative and model programs in vocational education shall exist to meet manpower needs in new and emerging occupations.

(8) The effects of sex bias and sex stereotyping will be reduced by the end of the five year planning period to assure equal access to vocational education programs by both women and men.

(9) Vocational education programs throughout the State shall be of a high quality and satisfactorily meet the needs of employers and all student populations served.

(10) Relevant vocational training shall be readily accessible to all student populations served in all geographic areas of the State.

(11) A comprehensive planning effort for coordination and consultation shall exist among all governmental agencies and organizations involved in the delivery of vocational training to achieve articulation of vocational education programs.

Purpose

The Vocational Research Coordinating Unit (VRCU) of the State Department of Education is currently conducting a statewide needs assessment of vocational and technical education. The general design of the needs assessment includes several different components: a national overview of vocational programs, concepts and needs; legislative priorities of both the federal government and other state governments; economic and employment projections for South Carolina; and overviews of the vocational and technical systems in South Carolina.

The survey reported here has been conducted to determine how various groups perceive vocational and technical education needs in South Carolina. It represents a major component of the assessment. The VRCU contracted with National Evaluation Systems (NES) to provide technical assistance for this survey.

The survey targeted four groups: students, professional educators, the general public, and business and industry representatives. Survey questionnaires were developed for each group to provide information on the perceptions of each regarding:

1. the strengths and weaknesses of the state's vocational and technical education systems;
2. the educational goals for the state's vocational and technical education systems; and
3. the needs of vocational and technical students and systems.

Issues

The issues of concern to this survey were divided into three major sections: input, process, and output. "Input" is defined as what "goes in" to the make-up of vocational and technical educational schools (e.g., students, financing, legislation); "process" as what occurs in the schools, centers, and colleges; and "output " as the quantity and quality of the students graduated or trained (including adults and part-time students) at the schools. These issues were reviewed by the Coordinating Committee and VRCU personnel who determined which of the four groups being surveyed could best answer specific questions about each issue. These reviews then served as the basis for questionnaire development.

The issues are:

1.0 INPUT

1.1 Policy and Regulation

What are the state and local policies and legislation concerning the vocational-technical schools in the state?

1.2 Characteristics of the Students

What are the characteristics of the students at the secondary, postsecondary, and adult education levels?

1.3 Handicapped and Disadvantaged Students

To what extent are handicapped and disadvantaged students being served?

1.4 Facilities

Are the facilities adequate?

1.5 Role of Advisory Committees

Are Advisory Committees and Craft Committees playing a useful role?

1.6 Staff Development

What staff development is occurring to ensure that the staff training is up-to-date?

1.7 Sex Bias

Does equal access to vocational and technical programs exist for men and women?

1.8 Program Relevancy

Are programs relevant and up-to-date?

1.9 Program Availability

Are educational opportunities in vocational and technical education readily accessible to all student populations in all geographic areas of the state?

2.0 PROCESS WITHIN THE SCHOOLS

2.1 Innovative and Model Programs

Are there innovative and model programs being developed to meet manpower needs in new and emerging occupations?

2.2 Prevocational Opportunities

Do appropriate prevocational educational opportunities exist for all ninth and/or tenth grade students in the state?

2.3 Adult Vocational Education

What opportunities exist for adult retraining and upgrading of job skills?

2.4 Planning Effort for Coordination

What planning exists among governmental agencies and organizations involved in the delivery of vocational training to achieve articulation of vocational education programs?

2.5 Program Update and Modification

What procedures exist to update programs, modify content or eliminate outdated programs?

2.6 Articulation Between Academic and Vocational Programs

What is the level of articulation between academic and vocational programs?

2.7 Articulation Between Vocational and Technical Programs

What is the level of articulation between secondary and postsecondary vocational programs?

2.8 Counseling Procedures

What counseling procedures exist and how effective are they?

3.0 OUTPUT

3.1 Job Placement Success

What percentage of graduates find jobs? How many find jobs in the area of their training?

3.2 Job Placement Activities

What support activities are available to help students find jobs?

3.3 Quality of Vocational and Technical Education

How satisfactorily are students trained for jobs?

3.4 Quantity of Program Graduates

Does the number of students trained in various vocational and technical programs match employment needs?

3.5 Follow-up Data

What follow-up data are gathered on program graduates and how are the data utilized?

3.6 Vocational and Technical Education Strengths and Weaknesses

What are the perceived strengths and weaknesses of vocational-technical education in South Carolina?

Respondent Groups

Four groups of respondents were surveyed: educators, students, the general public, and members of business and industry. These groups and their subgroups were defined as follows:

Educators. The educators were classified into five subgroups:

1. Educators from the local public school systems, including vocational center directors, county, district, and area superintendents, district vocational consultants, vocational and prevocational teachers, and junior and senior high school principals.
2. Educators from the local technical education institutions, including TEC presidents and directors, TEC deans, TEC area commission chairmen, and TEC full-time faculty members.

3. Educators at the state level in the public education system, including selected staff members of OVE, selected staff members of other SDE offices, and faculty members of vocational teacher training institutions.

4. Educators at the state level in the technical education system, including selected central office staff members of TEC.

5. Educators from other state agencies, including staff members who direct vocational programs funded through or otherwise associated with SDE or TEC.

Students. The students were classified into three subgroups:

1. High school seniors, those students who will graduate from the state's high schools in the spring of 1978.

2. TEC students and graduates, those who were enrolled in a regular diploma or degree program during the spring quarter of 1977 (excluding those students enrolled in General Education Development (GED) programs, community improvement programs, and "special schools" programs).

3. Adult vocational students, those who were enrolled for the purpose of finding employment or of upgrading present employment in programs sponsored by secondary vocational institutions. This excluded students enrolled in GED programs and community improvement programs.

The Public. This group included a representative sample of the state's population, based on latest census data. Persons having any professional connection with the state educational system were excluded, as were persons who were connected as students with any of the student groups surveyed.

Representatives of Business and Industry. This group included management personnel, and was weighted according to current average employment by nine industry groups (see Chapter III) as reported to the South Carolina Employment Security Commission.

Procedures

The needs survey was conducted from December 1977 to March 1978. (A detailed description of survey activities is given in Chapter III of this report.) During the preliminary stages of the project, data gathering instruments (questionnaires and interview formats) were developed, and a sampling plan for their administration was designed. Initial contact was established by means of an introductory letter and a brochure to facilitate administration by mail or by phone (for group administration) of the questionnaires.

Instruments. In order to ensure the reliability of the information generated by the survey, the following guidelines were established for the development of all data-gathering instruments.

- All questionnaires would be prepared in multiple-choice format.
- Directions would be easy to follow, so that respondents would have no problems completing the questionnaire independently.
- The length of the instrument would be carefully controlled, so that respondents would not be discouraged from completing the questionnaire.
- No questionnaire would exceed a seventh-grade reading level.

The VRCU was responsible for sampling and mailing of the questionnaire to the business and industry group. NES was responsible for sampling and mailing of the questionnaire to the educator and student groups. NES also conducted the phone survey of the general public.

Upon completion of data gathering activities and data analysis, NES consultants in vocational and technical education studied the information gathered in the assessment. Their input has been incorporated into the analysis sections of this report.

Use of Results

The general intent of the survey was to obtain the four groups' evaluations of South Carolina's vocational and technical education systems. Concomitant with this aim was an endeavor to determine their perceptions of the strengths and weaknesses of vocational and technical education in the state. Specifically, the results of the survey will be used to provide the State Department of Education and the State Board for Technical and Comprehensive Education with an indication of priority need areas, and suggestions for improvement as perceived by the groups. The collection of data concerning the groups' perceptions is part of the statewide assessment of vocational and technical education needs being conducted by the Vocational Research Coordinating Unit. Information gleaned from the survey will hence become a part of the statewide needs assessment and will be used with other data in determining future goals for vocational and technical education in South Carolina.

CHAPTER II

CONCLUSIONS AND RECOMMENDATIONS

This chapter contains the conclusions and recommendations resulting from the survey of vocational and technical education needs in South Carolina. The data upon which the conclusions and recommendations are based were generated by the survey activities described in Chapter III. The reader interested in examining the data in detail is referred to Chapters IV through VII where data gathered from, respectively, educators, students, business and industry representatives, and the general public are presented.

General Conclusions and Recommendations

- CONCLUSION: In general, the vocational and technical education systems in South Carolina are doing a good job of preparing students for employment and/or further education. Specifically, those respondents from the general public who had attended programs noted that the program improved their job skills. Similarly, business and industry gave good ratings for the work habits, attitudes, and attendance records of program graduates. Educators noted the positive attitudes of teachers and counselors toward vocational and technical programs. The majority of students in these programs felt they were being well prepared for future employment or education. Ninety-nine percent of the employers surveyed indicated they would hire program graduates if they had the skills needed by the employer.

RECOMMENDATION: Continue to develop the vocational and technical education systems in order to serve as many of the students in South Carolina as possible. Carefully plan and monitor this development in order to ensure that the needs of both students and business and industry are met.

- CONCLUSION: Even though the vocational and technical education systems are making a substantial contribution to vocational education in South Carolina, certain areas are in need of some improvement.

RECOMMENDATION: Implement the following recommendations and conduct follow-up evaluations to monitor the resulting improvements. Specifically:

— Ensure that students are made more aware of job placement services and determine if these services are functioning as effectively as possible.

— Increase the availability and effectiveness of staff development and teacher training programs.

— Develop the role and value of advisory committees.

— Ensure that adult vocational students are made more aware of the counseling services available to them.

— Increase the coordination between general academic and vocational programs to improve the students' training in basic skills prior to their entering the vocational programs.

—Expand the effort to determine the employment needs of all types and sizes of businesses and industries.

—Increase business and industry's awareness of the abilities of both sexes.

—Make potential employers more aware of the specific content of the vocational programs and the level of skill sought to be developed by these programs.

—Make the general public more aware of the availability of vocational and technical programs both for themselves and for their children.

Specific Conclusions and Recommendations Relating to Program Input

Handicapped Students

- CONCLUSION: Thirty-three percent of all the students surveyed who had a physical handicap (4%) reported it to be a problem at their school. A higher proportion of the technical students with handicaps (54%) reported it to be a problem at their school.

  RECOMMENDATION: With the number of students reporting having a physical handicap being so small, it is difficult to make recommendations on what changes need to be made to accommodate the physically handicapped. A first step would be to make an in-depth study of handicapped students and the facilities available to them in order to determine if the implications made here are an indication of a potential problem area.

- CONCLUSION: Only about one third of the schools surveyed said they had special programs or guidelines to aid in job placement of the handicapped. Of these, about 75% reported the program to be only moderately successful.

  RECOMMENDATION: Review the procedures being used by the programs now in service and identify the activities which appear to be particularly successful. Use this information to develop model programs and guidelines for all institutions.

Sex bias

- CONCLUSION: The students and educators surveyed reported very little sex discrimination to be occurring in the educational institutions, either in admissions or in the programs themselves. However, it was generally agreed that business and industry usually hired and placed new employees according to traditional sex roles. That is, males were hired for jobs generally held by males, and females were hired for jobs generally held by females.

  RECOMMENDATION: Maintain an active effort to ensure the equal access of both men and women to all educational programs. Additional efforts should also be made to make business and industry aware of the abilities of both sexes. This can be accomplished by having the educational institutions publish program enrollments by sex to show the public in general and industry in particular that both sexes are being trained for *all* types of jobs. Industry should also be encouraged to interview potential employees without regard to sex.

Facilities

- CONCLUSION: The majority of the public (75%), students (87%), and educators (87%) surveyed reported that the buildings, equipment, and materials used in their programs were adequate for the programs being offered.

  RECOMMENDATION: Continue to monitor the needs of existing and new programs to ensure that equipment and materials are appropriate and up-to-date.

- CONCLUSION: Educators find state-prepared educational materials to be useful. About 80% of the vocational educators surveyed used state-prepared instructional materials and, of these, nearly all reported them to be as good as, if not better than, other available materials. Only slightly over one-fourth of the technical educators used these materials in their programs (however, TEC does not specifically develop and provide materials as vocational education does).

  RECOMMENDATION: Continue to monitor the needs of vocational educators for state-prepared instructional materials and determine if these types of materials would be of value to technical educators and, if so, make them available for TEC educators.

Role of advisory committees

- CONCLUSION: Most educators find advisory committees (made up of members of the business community) to be helpful. Slightly over three-fourths of the vocational educators (78%) and TEC educators (79%) felt their advisory committees contributed to the educational programs to at least a moderate extent. However, about 20% of both groups felt the committees contributed to a small extent or not at all.

RECOMMENDATION: Good advisory committee relationships should be encouraged and developed for all school programs. Given the potential of the advisory committees for both enhancing community relations and providing valuable technical input into the vocational programs, local administrators should be encouraged to make an active effort to revitalize the committees and expand their bases of activity where necessary. To increase the effectiveness of the committees, administrators should ensure that they have well-defined roles and strong leadership.

Program availability

- CONCLUSION: Not all students are in the program of their choice. While only 13% of the vocational students reported they were not in the program of their choice, 25% of the technical students made this same claim.

RECOMMENDATION: Determine the exact reason why these students are not in the program of their choice. It is not possible to determine, from the data at hand, whether students were not in the program of their choice because of enrollment limitations, program prerequisites and/or qualifications, or inadequate offerings.

- CONCLUSION: Over 60% of the respondents from the general public were not very familiar or not familiar at all with vocational and technical programs in South Carolina.

  RECOMMENDATION: A concentrated effort to make all South Carolinians aware of these programs should be made. This should include awareness as to the potential for upgrading present skills or learning new skills for adults, as well as training and educational opportunities for their children. This awareness could take the form of publicity in newspapers, magazines, television, and radio; or a bureau of speakers from vocational and technical programs could be created to address parent and civic groups describing the opportunities available in these programs.

Program relevancy

- CONCLUSION: Smaller companies within the state were less familiar with the vocational training programs and were less often contacted for input into the programs. Also, manufacturers of durable and nondurable goods were solicited for input more frequently than were the other types of industry within the state.

  RECOMMENDATION: Broaden the scope of input into vocational and technical education programs by making an effort to work with all types and sizes of industries. Not only would this effort provide valuable input into the programs but it would also serve to familiarize many more potential employers with the programs.

- CONCLUSION: Over 60% of the business and industry representatives surveyed said that they seldom or never visited their local vocational centers or technical education institutions.

  RECOMMENDATION: A program should be established for involving more members of the business community in vocational and technical education. This should include periodic tours of local facilities with the aim of familiarizing employers with the programs and soliciting their input for program development. This could result in vocational and technical program improvement, better awareness by industry as to the types and skill levels of graduates produced by the programs, and more job opportunities for graduates. The input provided by such activities should serve as a supplement to that provided by the advisory committees.

Staff development

- CONCLUSION: While 72% of the vocational educators reported that teacher training was available to them to at least a moderate extent, only 38% of the technical educators made the same statement. When asked the extent to which these programs helped the teacher, 71% of the vocational educators reported that they helped at least to a moderate extent. Only 44% of the technical educators said they were helped to at least a moderate extent.

  RECOMMENDATION: Review the programs now in existence to determine what percentage of all types of educators are utilizing them and to what extent they are effective in aiding the teachers. Also, survey the educators to determine the areas of need and their reactions to inservice teacher training programs.

- CONCLUSION: While about 75% of the vocational educators said that professional development and/or graduate courses were available to them, only 60% of the technical educators made the same statement.

  RECOMMENDATION: Review the opportunities currently available to educators of all types. Determine why more technical educators do not have access to these programs. Also. survey all educators in order to determine their level of awareness of these opportunities, whether they would take advantage of such opportunities if they were available, and what types of programs they would like to see offered. Determine whether the problem is insufficient publicity for existing programs or a need for development of new programs.

Adult vocational education

- CONCLUSION: While 83% of the vocational students and 55% of the technical students surveyed reported that they had used their school's guidance services, only 22% of the adult vocational students reported that they had used these services. In addition, other data from the survey suggest that the adult vocational students do not always have an accurate perception of the job market. Hence, they may select programs for which there is little hope of employment.

RECOMMENDATION: Make a concerted effort to ensure that adult vocational students are aware of guidance services, particularly vocational counseling, and utilize these services where appropriate. This should be a prerequisite for their admission to a program. They should also be advised of the current and projected needs of business and industry. These activities could be incorporated into a short orientation program for adult students.

Specific Conclusions and Recommendations Relating to the Educational Process

Counseling procedures

- CONCLUSION: The majority of students (66%) had utilized their school's counseling services and most (93%) found the experience useful. Additionally, students reported that counselors and teachers generally had a positive attitude toward vocational education.

RECOMMENDATION: Continue to provide good service to the students and make efforts to encourage all students to utilize the services available to them. (There were, however, some specific problems associated with school guidance services, and these are discussed in the section of this report dealing with job placement and with adult vocational education.)

Prevocational opportunities

- CONCLUSION: Slightly over half of all students surveyed (53%) said they had taken prevocational courses (including home economics and industrial arts), and, of these, half (50%) reported that the courses had helped them decide upon an occupation.

  RECOMMENDATION: Continue to develop prevocational programs. Determine why only half the students taking these courses said the courses helped in making decisions on an occupation. Expand the types of prevocational courses being offered to include such topics as career orientation and opportunities.

Articulation between programs

- CONCLUSION: It is the general feeling of vocational educators that many students lack proficiency in basic skills. While the majority of students (93%) feel they were well prepared for their vocational or technical program in terms of basic reading, writing, and arithmetic skills, only 7% of the educators found them to be well prepared. TEC students were generally considered by their instructors to have good vocational backgrounds.

  RECOMMENDATION: Establish procedures for increasing the articulation between general academic and vocational programs to ensure that basic skills are emphasized in the general academic programs. Specifically, when students are introduced to vocational education, via prevocational activities, an effort must be made to make them understand and appreciate the essentiality of basic skills for achieving competencies in vocational programs.

Specific Conclusions and Recommendations Relating to Output of Programs

Quality of Education

- CONCLUSION: All groups surveyed considered vocational education in South Carolina to be of generally good quality. Members of the general public who had taken programs considered them to have helped in the improvement of their job skills. Business and industry gave generally good ratings of the graduates' work habits, attitudes, and attendance records. Nearly all students felt they were being well prepared for their future and they gave their teachers good ratings as well.

  RECOMMENDATION: Continue determining the needs of students and industry so that vocational and technical programs can remain up-to-date and responsive to these groups.

Job placement activities

- CONCLUSION: Employers (73%) reported that the initial contacts with graduates came from student initiative, personal contact, instructors, and/or counselors. From the employer's view, school placement services accounted for a very small percentage (8%) of the placements. When employers who had not hired any vocational program graduates were asked why they had not, they most often reported that either there was no demand or no graduates applied.

RECOMMENDATION: Develop more comprehensive job placement programs for the vocational centers and technical education institutions. Particular emphasis should be placed upon the regular assessment of the needs of business and industry and the matching of graduates to these needs. A special effort should be undertaken to make employers more aware of the availability of trained graduates and to encourage them to contact the placement services when they have job openings.

Quantity of program graduates

- CONCLUSION: Employers project future employment needs to be greatest in the areas of industrial trades, office occupations, and textiles. They report that it is currently difficult to find skilled workers in the areas of industrial trades, textiles, and engineering. All agree that it is easiest to hire people for office occupations.

RECOMMENDATION: Encourage standard procedures for regularly assessing the current and projected needs of business and industry. Provide summaries of the results to educational personnel at the local level. Ensure that school guidance personnel have access to this information and that they share it with the students during counseling sessions.

Perceived strengths and weaknesses

- CONCLUSION: The primary perceived strength of South Carolina's vocational and technical education systems, as seen by all groups surveyed, is their responsiveness to the needs of business and industry.

  RECOMMENDATION: Maintain the present fine effort to continue this responsiveness. Specific recommendations concerning the assessment of the needs of business and industry have been given in other sections of this report.

- CONCLUSION: Many business and industry respondents (22%) noted that graduates from both the technical and vocational education programs lacked depth in their job skills.

  RECOMMENDATION: Employers should be made more aware of the specific content areas dealt within a program and the level of skill sought by the program. Similarly, students should be made more aware of the particular types of knowledge and skills they will need for given job situations.

CHAPTER III

STUDY DESIGN AND PARTICIPATION

The primary concern when designing the plan for the survey of perceptions of South Carolina's vocational education needs was to produce both an adequate quantity and quality of information on which to base the conclusions of the study. This information, from diverse groups, would be the primary means of determining how well vocational education needs are presently being met and of determining what the future needs of vocational education will be in South Carolina. This chapter presents a brief overview of the sampling plan (below) followed by a more detailed description of the various components of the plan.

General Plan of the Study

To ensure the quantity of information needed for the survey several preliminary steps were taken. First, letters describing the survey were written by the VRCU. One letter, signed by the Director of the Office of Vocational Education, was sent to superintendents one month prior to the survey. A similar letter, signed by the Executive Director of the State Board for Technical and Comprehensive Education, was sent to TEC presidents and directors one month prior to the survey. Second, an attractive two-color brochure describing the overall purpose and procedures of the survey was designed (see Appendix C) and mailed to all persons in the sample prior to the questionnaire mailing. Third, after obtaining district approval, all high schools and vocational centers in which group-administered questionnaires were to be completed were contacted by phone. The principal or director of each school or center was asked for his cooperation in the study and was informed that the questionnaires would be mailed to him personally. He was then requested to have them administered and to return them to the contract agency.

To ensure quality of information, drafts of the questionnaires were reviewed twice by NES technical consultants and the Needs Assessment Coordinating Committee assisting the VRCU. A panel of vocational center directors and TEC presidents and directors also reviewed the drafts. They were reviewed with consideration to the input, process, and output of the vocational and technical systems. Comments from these groups contributed in large measure to the production of the final forms of the survey instruments. The questionnaires were designed not only to gather the necessary information but also to be physically attractive and easy to fill out.

The sampling plan developed by NES for the survey was a carefully defined probability sample (random sample) using multi-staged sampling techniques for each of the sources of information. Included in the sampling design were specifications for oversampling to compensate for non-response in difficult samples.

To ensure that the information generated by the above activities would produce conclusions and recommendations relevant to the goals of the survey, consultants who are experts in the field of vocational and technical education reviewed the resultant data and the drafts of preliminary conclusions and recommendations. These data and drafts were also reviewed by the Coordinating Committee and VRCU personnel. Based on the input from these reviews, the conclusions and recommendations were revised for inclusion in this report.

Sampling Procedures

Sampling procedures will be discussed by group: educator, student, the public, and business and industry. Initially proposed sampling sizes are presented in Table 3.1.

Educators. Different sampling procedures were used for each subgroup of educators. In the public education system, local personnel were sampled in a two-stage procedure which was sensitive to the heterogeneity of the population. In Stage 1, the state was divided into regions, and the schools within the regions were divided according to the size of school enrollment. The proportion of the state's population living in each region determined the number of educators to be sampled for that region. The regions and their respective proportions of the state's population were as follows:

Piedmont	28%
Midlands	32%
Low Country	25%
Pee Dee	15%

TABLE 3.1

Proposed Sample Sizes by Source of Information

Source	Population	Sample Size	Sample Characteristic	Follow-Up Procedure
ublic	2,818,000	600	individual	call back
tudents (total)		1,240		
High School Seniors	40,000	450	classroom	with school
TEC Students	32,000	480	individual	mail to non-respondents
Adult Vocational Students	2,500	310	classroom	with school
rofessional Educators (total)		679		
Public Education—Local	2,856	380	individual and classroom	mail to non-respondents
Technical Education—Local	1,190	230	individual	mail to non-respondents
Public Education—State	54	54	individual	mail to non-respondents
Technical Education—State	7	7	individual	mail to non-respondents
Other Agencies	8	8	individual	mail to non-respondents
usiness and Industry	57,411	2,543	individual	mail to non-respondents

Schools within each region were divided into three size groups according to enrollment. These were: schools with an enrollment of less than 700, schools with an enrollment of 700 to 1200, and schools with an enrollment of over 1200. At least one school from each group was selected in the sample. The number of schools selected from each region is shown on Table 3.2.

In Stage 2, the principal and up to 20 teachers were selected from each school. Additionally, all superintendents and vocational center directors from every district were surveyed. This oversampling of administrators was done to ensure accurate reflection of their opinions.

The technical education system at the local level was similarly sampled. All presidents, directors and administrators were surveyed; the remainder of the respondents (teachers and instructors) were selected in proportion to the population of the geographical region in which the school was located.

No sample procedures were required for the public education system at the state level, the technical education system at the state level, and other agencies, since all individuals from these subgroups were surveyed.

Students. Different sampling procedures were used for each subgroup of students. High school seniors were selected using a two-stage probability sampling procedure, with cluster sampling at both stages. In Stage 1, the state was stratified by region (the same regions used for educators). Specified within each region, schools containing high school seniors were selected with account taken for school enrollment (the same size groups used for educators), so that schools had a probability of being selected proportional to their size. In Stage 2, individual classrooms were selected from each school, also proportional to their size. (See Table 3.2 for the number of schools selected from each region.)

TABLE 3.2

Number of Schools/Programs Selected from Each Region for Group Administered Questionnaires

Type of School/ Group Sampled	Number of Schools in Each Region			
	Midlands	Pee Dee	Piedmont	Low Country
High Schools (High School Seniors)	8	3	4	4
High Schools and Vocational Centers (Teachers)	10	5	8	9
Vocational Centers (Adult Vocational Students)	5	4	5	4

Because cluster sampling was used whereby entire schools and their intact classrooms were sampled, a slightly larger sample was selected to compensate for the decreased precision resulting from this sampling procedure.

The TEC students were also selected through a two-stage sampling procedure. An oversampling of students was conducted to compensate for an expected lower response rate—this group of students received questionnaires directly by mail rather than in a classroom setting. In Stage 1, the individual students were classified by region. In Stage 2, students were randomly sampled from each region with the size of each regional sample proportional to the population of that region of the state.

As with the high school students, the adult vocational student subgroup was also selected by classroom through a two-stage sampling procedure. In Stage 1, the state was divided into regions and the schools within each region were selected in proportion to their respective regional enrollment. In Stage 2, individual classrooms within schools were selected (again in proportion to school enrollment) to ensure that each had an equal probability of being selected. This guaranteed that the samples represented a probability sample. One classroom was selected from each school that was sampled. An attempt was made to select classes by the type of course being taught, so that all types of programs would be represented in the survey.

Business and Industry Representatives. Sampling for the business and industry group was the responsibility of the Vocational Research Coordinating Unit. Arrangements were made so that respondents were selected by the South Carolina Employment Security Commission from their confidential files. A two-stage sampling procedure was used. In Stage 1, nine industry divisions were used (based on the Standard Industrial Classificaton Manual, 1972). These included: construction; manufacturing, durable goods; manufacturing, nondurable goods; transportation, communications, and other public utilities; wholesale trade; retail trade, finance, insurance, and real estate; services (excluding educational services and private households); and public administration. In Stage 2, each industry was further divided into four classes by size, based on number of employees. These were: Class 1, 1-9; Class 2, 10-49; Class 3, 50-249; and Class 4, 250 and over.

Public. Administration of the instrument for this group was by telephone interview. Sampling was carried out in two stages. Stage 1 stratified the state by region with the percentage of individuals selected from each region proportional to the population of that region. In Stage 2, a random digit dialing system was used to contact the required percentage of individuals within each region.

Instruments

The design of the survey required the development of three questionnaires tailored to each of the three separate respondent groups, (Appendix B) and a telephone interview format (Appendix B) to be administered by trained telephone interviewers to the general public. The design of all information collection instruments was done in such a manner as to guarantee the anonymity of all participants.

Questionnaires. These were designed to gather information from the students, professional educators, and business and industry representatives. To ensure that they would produce information that was accurate and relevant to the goals of the assessment, a group of experts in the fields of vocational education and questionnaire construction reviewed and refined all questions developed by NES.

Telephone survey instruments. Similar procedures were used for developing the telephone survey instrument. Additional experts in the field of telephone surveys reviewed this instrument to ensure that it would produce the highest possible response rate and quality of information.

Data Gathering Procedures

Initial contact with local personnel. In late December, 1977, and early January, 1978, in advance of the questionnaire mailings, initial contact with educators, administrators, and business and industry representatives involved in the assessment activities was established by several means. Superintendents and TEC presidents and directors were mailed introductory letters signed by the Director of the Office of Vocational Education and the Executive Director of the State Board for Technical and Comprehensive Education, respectively. Later, sampled educators in the TEC system, sampled students and graduates of the TEC system, and sampled superintendents, principals, and vocational center directors, as well as business and industry representatives, were sent the two-color brochure describing the overall purpose and plan of the assessment. In the case of group administered questionnaires (high school students, adult vocational students, and teachers) an introductory phone call was first made to the district superintendent of the involved schools requesting his permission to use the schools. Next, the principal, school director, or adult vocational director was contacted by phone. These persons were asked to distribute, administer and return the questionnaires. Due to the type of sampling used, no advance contact was made with the public group.

Supplemental Sampling

While the number of respondents sampled for each group took into account an expected response rate of less than 100%, which is normal for any mailed survey, it was decided in some instances that an even larger sample should be selected. Reasons for this varied according to the group. These reasons are described below.

1. High school students and adult vocational students—These two subgroups which were administered questionnaires in intact classrooms were oversampled because the class sizes given by the contact person in the schools were for the largest classroom size that would be used. Therefore, consideration had to be given to the possibility that the instrument would not be administered to as large a class as expected and also that some students would be absent.
2. TEC students and graduates—This type of group historically does not have a high survey return rate. Therefore, an additional sample of 100 was selected. This group also required the largest number of follow-ups to be sent (400).
3. TEC educators—This group was oversampled because it was felt that the response rate would not be as good as was originally anticipated. Because of this and the number of follow-up instruments mailed, the total desired (i.e., proposed) number of respondents was nearly attained.
4. Public Educators, local—This group had the largest number of subgroups. The original survey plan was to sample 100 administrators

(superintendents, vocational center directors, and principals) of the 380 respondents proposed. After sampling and the first mailing were completed, the VRCU decided that all superintendents and vocational center directors should be surveyed. It also became apparent that, since the teacher sample was drawn from the high schools it might not include enough trade and industrial teachers; therefore an additional sample of 100 vocational teachers was selected from vocational center faculties. With these additional selections the total number of respondents completing the questionnaire turned out to actually be larger than originally proposed.

5. State Level Educators—This group originally was going to be 70 persons, but the VRCU added 17 to the list. All 87 persons were sent a questionnaire as was originally intended; however, response rates for this group were not as high as had been desired, due in part to the inapplicability of the questionnaires to some of the respondents in this group. NES did receive a letter from one such respondent giving this reason for not completing the questionnaire.

Questionnaire mailing. On January 18, the Vocational Research Coordinating Unit mailed the business and industry questionnaire. On January 27 the educator and students questionnaires were mailed. Packages sent to individuals included a questionnaire, a cover letter describing the project, and a stamped pre-addressed return envelope. Packages for group administration included a letter to the principal/director (reminding him of his agreement to administer the questionnaire), cover letters and brochures to be distributed to the respondents, questionnaires and a stamped pre-addressed package for returning the questionnaires.

Telephone interview. Training of telephone interviewers took place during the week of January 23. The phone survey began January 31 and was completed February 25 with a total of 2100 persons called and 620 interviews successfully completed.

Follow-up mailings. The initial response rates for employers, TEC students, and TEC faculty were considered adequate for mail surveys in the field of education. However, follow-up mailings were sent to each of these groups to produce an even better response rate. Response rates for all other groups were considerably higher than the rates expected for mail surveys in education. Nevertheless a follow-up by phone was made for the group-administered questionnaires.

The business and industry questionnaire produced a 25% return after the initial mailing. A follow-up mailing was sent to two-thirds of the respondents, with establishments for each business or industrial division randomly omitted according to the number of units in the original sample and the percentage of initial responses.

No follow-ups were necessary for the telephone part of the survey as calls were continued until the desired number of interviews were completed.

The actual number of the sample sizes and number of questionnaires mailed, and telephone interviews completed, as well as the return rates given in percentages are provided in Table 3.3.

TABLE 3.3

Questionnaire Mailing, Telephone Survey, and Response Rates

Respondent Group	Proposed Sample Size	Number of Questionnaires			Response Rate
		Number Sent	Number of Follow-Ups	Number Returned	
EDUCATORS:	680	998		724	73%
PUBLIC EDUCATORS, LOCAL	380	631		477	76%
Superintendents		121		69	57%
Vocational Center Directors		57		44	77%
Principals		51		39	77%
Teachers		402		325	81%
TECHNICAL EDUCATORS, LOCAL	230	250	80	195	78%
Presidents and Deans	64	64	17	39	61%
Instructors	166	186	63	156	84%
STATE-LEVEL EDUCATORS AND OTHERS	70	87		52	60%
STUDENTS:	1240	1508		967	64%
High School Seniors	450	540		520	96%
Adult Vocational Students	310	348		211	61%
Technical Students and Graduates	480	900	400	236	26%
BUSINESS AND INDUSTRY	2543	2522	1300	1165	46%
PUBLIC (Telephone Interviews)	600	2100*		620**	103%***

* Number of calls made
** Number of successful interviews
*** Response total compared to proposed sample size

Data collection and preliminary processing. In mid-February, as completed questionnaires began to be recieved, preliminary data processing was begun.

Questionnaire processing included a check of which respondents returned the questionnaires. Coding included a review of the demographic and question-by-question responses for clarity and completeness as well as a categorization of the open-ended questions. The information was then keypunched onto data cards and verified. March 3 was set as the deadline for receiving completed questionnaires. Coding and keypunching was completed by March 7.

Data analysis. A modified SPSS (Statistical Package for the Social Sciences) program was used for analyzing the questionnaire data. The analysis produced the following categories of information for each question

1. The actual number of times each response choice was selected.
2. A set of percentages showing the relative frequency with which each possible response to a question (including "no response") was selected. (The percentage here would be calculated against the total number of respondents to the questionnaire.)
3. A set of percentages showing the relative frequency with which each possible response to a question (with "no response" excluded) was selected. (The percentages here would be calculated against only the number of respondents actually responding to the particular question.)

In order to produce a set of conclusions and recommendations relative to the goals of the assessment, all information generated by the above activities was put through the following steps:

1. The data analysis computer output was reviewed by NES in-house staff and preliminary findings were produced.
2. NES technical consultants reviewed these findings and made recommendations for the conclusions and recommendations.
3. A draft of the final report was produced and presented to the Coordinating Committee for its approval and comments.
4. The final report was revised and completed, based on the review comments of the Coordinating Committee.

CHAPTER IV

GENERAL PUBLIC SURVEY

This chapter summarizes the results obtained from the telephone survey of the general public. Following a description of sample characteristics, questions relating to input, process, and output are discussed separately. Questions which did not yield important data are not discussed in this chapter. The reader interested in the results of all questions and reporting by subgroup and geographical region should refer to Appendix D.

Characteristics of the Sample

Respondents to the public survey were distributed geographically in nearly the same pattern as the population of the state (Table 4.1). Of the 620 respondents, 69% were white and 31% were black; about one-third were males and two-thirds were females (Table 4.2). The majority (81%) were between the ages of 20 and 60 (Table 4.3). Slightly over one-third (39%) had children between the ages of 15 and 24 who could possibly have been in vocational education programs. A diverse range of educational status was found: 35% of the respondents had less than a twelfth-grade education, 33% had 12 years of education, and 32.5% had some formal education beyond high school (Table 4.4).

Employment Background of Sample. Respondents were asked if they were employed, and if so, whether they worked full-time. If they were not working they were asked what they were doing. If they were unemployed they were asked if they were seeking work. Respondents were asked if they had taken courses to upgrade their skills since leaving school. Finally, they were asked, if employed, what category their job was in, and if unemployed, what type of job they were trained for.

Slightly over half (59%) of those surveyed were employed, and most of these (87%) held full-time jobs. Of those surveyed who were not working, the majority (51%) were homemakers, 30% were retired and 19% were unemployed. of those who were unemployed, 53% were seeking work. A total of 36% of those surveyed had taken courses to upgrade their job skills since leaving school (Table 4.5).

The largest single job categories for those employed were office occupations (14%) and textiles (12%). The largest incidences of unemployment were among people trained for office occupations (18%), textiles (16%), and allied health (13%). When asked the area in which they felt training would best help their employment opportunities, the largest area chosen was office occupations (25%), followed by professional/administration training (15%)and then allied health (12%) (Table 4.6).

TABLE 4.1

Geographical Distribution of General Public Respondents Compared with State's Population Distribution

Geographical Region	Percentage of Respondents/Population in Each Area	
	Sample Distribution	State's Population Distribution
Piedmont	27	28
Pee Dee	16	15
Midlands	36	32
Low Country	21	25

TABLE 4.2

Racial and Sexual Characteristics of General Public Respondents

	Percentage of Respondents, by Geographical Area				
	All	Piedmont	Pee Dee	Midlands	Low Country
	What is your ethnic background?				
White	69	69	70	73	61
Minority	31	31	30	27	39
	What is your sex?				
Male	34	28	30	36	39
Female	66	72	70	64	61

TABLE 4.3

Age Characteristics of General Public Respondents

Age	Percentage of Respondents Indicating Each Age
18-20	4
21-34	37
35-59	44
60 or over	16

TABLE 4.4

Educational Characteristics of General Public Respondents

Highest Grade Completed	Percentage of Respondents Indicating Each Amount of Education
2- 6	6
7-11	29
12	33
13-16	28
17-24	4

TABLE 4.5

Employment Characteristics of General Public Sample

	Percentage of Respondents, by Geographical Area, Indicating Each Characteristic				
	All	Piedmont	Pee Dee	Midlands	Low Country
Are You Employed?					
Yes	59	53	53	66	59
No	41	47	47	34	41
If employed, full-time or part-time?					
Full-time	87	84	90	86	93
Part-time	13	16	10	14	7
Have you taken courses to upgrade your skills since leaving school?					
Yes	36	35	30	40	37
No	64	65	70	60	63
If not working, what are you doing?					
Retired	30	28	33	37	20
Homemaking	51	52	59	42	55
Unemployed	19	20	9	22	25
If unemployed, are you seeking work?					
Yes	53	48	40	58	56
No	47	52	60	42	44

RESULTS RELATING TO INPUT

This section focuses on the following input variables of the educational process:

- handicapped students
- physical facilities
- sex bias

Handicapped Students

Respondents were asked if they had a handicap, and if so, did physical barriers prevent them from attending a program (Table 4.7). They were also asked if a handicap prevented them from being accepted into a program. Of those interviewed, 15% stated that they were handicapped and of these, 31% felt that physical barriers prevented them from attending a program; 24% felt that their handicap had prevented their acceptance into a program.

Facilities

Respondents were asked how good they thought the physical facilities of vocational and technical programs were (Table 4.8). The majority (75%) of those surveyed felt the physical facilities were very adequate for the programs being offered.

TABLE 4.6

Occupational Characteristics of General Public Respondents

Occupational Area	Percentage of Respondents, by Employment Status, in Each Occupational Area		
	Employed, Type of Work	Unemployed, Area Trained	Unemployed, Perceived Skills Needed
Office Occupations	14	18	25
Marketing Sales	8	3	8
Agriculture	2	2	1
Mechanics	3	6	4
Media	2	2	4
Engineering	2	3	5
Computers	0	0	4
Allied Health	7	13	12
Electronics	2	0	4
Social Services	2	5	3
Personal Services	7	5	3
Building Trades	8	10	3
Hotel/restaurant management	6	5	1
Industrial trades	10	3	7
Textiles	12	16	3
Professional/Administration	9	2	15
Trucking	2	2	0
Military/Government	5	0	0
Homemaking	0	8	0
Other	2	0	6

TABLE 4.7

Handicapped General Public Respondents Indicate Whether Their Handicaps Prevent Them from Attending or Being Accepted into a Vocational or Technical Program

Percentage of Respondents by Geographical Area Indicating Their Handicaps Prevent Them from Attending or Being Accepted into a Program

	All	Piedmont	Pee Dee	Midlands	Low Country
	If handicapped, do physical barriers prevent you from attending a program?				
Yes	31	33	5	46	29
No	69	67	95	54	71
	Did a handicap prevent you from being accepted?				
Yes	24	26	11	39	8
No	76	74	89	61	92

TABLE 4.8

General Public Respondents Evaluate the Adequacy of Physical Facilities

Percentage of Respondents, by Geographical Region, Indicating Each Degree of Adequacy

Degree of Adequacy	All	Piedmont	Pee Dee	Midlands	Low Country
Very Good	75	88	80	79	54
Acceptable	23	12	20	17	46
Inadequate	2	0	0	3	0

Sex Bias

Female respondents were asked if they thought they had been treated poorly or unfairly in a vocational or technical program because they were women. Very few (4%) of the women surveyed felt they had been treated poorly or unfairly because of their sex.

RESULTS RELATING TO PROCESS

This section focuses on the following variables within the educational process:

- public familiarity with programs
- counseling
- public experience with programs

Public Familiarity with Programs

Respondents were asked how familiar they were with vocational and technical education programs (Table 4.9). Those who were familiar with these programs were asked how this familiarity was achieved. Of those surveyed, 40% were at least "fairly familiar" with vocational/technical programs. Those who were familiar with the programs had become aware of them by means of actual enrollment (25%), friends or family (22%), and newspaper articles (16%).

Counseling

Respondents were asked if guidance counselors had recommended any vocational or technical programs, how useful this advice had been, whether aptitude tests had been offered, and what types of programs were suggested by the counselors (Table 4.10).

TABLE 4.9

General Public Familiarity with Educational Programs
and How It Was Achieved

	Percentage of Respondents, by Geographic Area, Indicating Extent and Means of Familiarity				
	All	Piedmont	Pee Dee	Midlands	Low Country
	How familiar are you with vocational and technical programs?				
Very Familiar	11	15	7	8	13
Fairly Familiar	29	29	27	29	30
Not too Familiar	45	42	50	44	48
Not Familiar at All	15	14	16	19	9
	If familiar, how did you learn about these programs?				
School Publication	11	11	0	17	9
Newspaper	16	19	13	11	22
Enrollment	25	14	42	27	29
Guidance Counselor	2	1	3	2	2
Enrollment of Family Member	22	29	23	19	19
Other	23	25	19	25	20

TABLE 4.10

Interaction of General Public and Guidance Counselors

	Percentage of Respondents Indicating Each Type of Interaction with Guidance Counselors
	Has a counselor recommended these programs?
Yes	22
No	78
	How useful was the advice that was given?
Useful	89
Not Useful	9
Misleading	2
	Were aptitude tests offered?
Yes	60
No	40

Only 22% of those surveyed had a guidance counselor recommend a vocational program. However, most of those who recieved such advice (89%) found it to be useful. When talking with counselors about future education or occupations, 60% of those interviewed were offered aptitude tests. When guidance counselors did recommend specific programs of study, the following three were most frequently recommended: industrial trades (24%), office occupations (14%), and professional/administration training (13%).

TABLE 4.11

Personal Experience of General Public with Vocational or Technical Programs

Percentage of Respondents Indicating Each Type of Experience	
	Have you looked into vocational or technical programs yourself?
Yes	23
No	77
	If yes, did you attend any of these programs?
Yes	63
No	37
	If not, why not?
Academic Reason	6
Poor Accessibility	10
No Openings	7
Other	78
	If other, what?
No Time	26
Personal Problems	42
Did Not Like Courses	26
Insufficient Money	5

Personal Experience with Programs

Respondents were asked if they had looked into vocational or technical programs themselves (Table 4.11). They were also asked if they attended such a program and if not, why not. A total of 23% of those interviewed had looked into vocational programs by themselves and 63% of these attended. Those who did not attend most often attributed it to personal problems (42%), lack of time (26%), or dissatisfaction with the courses (26%).

RESULTS RELATING TO OUTPUT

This section focuses on the following output variables of the educational process:

- job placement activities
- job placement success
- quality of vocational education
- perceived strengths and weaknesses

Job Placement Activities

Asked if guidance services and job placement services were provided at their institutions, 56% of the respondents indicated that guidance services were provided, and 65% indicated that some form of job placement service was available.

TABLE 4.12

Availability of Guidance Programs and Job Placement Services to the General Public

Services Provided?	Percentage of Respondents Indicating the Availability of Guidance and Job Placement Services	
	Guidance Services	Job Placement Services
Yes	56	65
No	44	35

Quality of Vocational Education

Respondents were asked if they had ever had a job for which they were vocationally or technically trained and, if so, to what extent the training helped (Table 4.13). Less than a third (31%) reported holding or having held a job for which they had received vocational or technical training. The largest number of respondents indicating that they had held such jobs came from the Pee Dee (42%) and the Midlands (38%). Most respondents (68%) who had such training for their jobs felt that the training helped them to a "great" or a "very great extent." More respondents from the Midlands (59%) reported that the training helped them to a "very great extent" than did respondents from other regions.

Perceptions of Strengths and Weaknesses

Respondents were asked how they thought vocational and technical education programs could be improved and how valuable they thought these programs were. While not many persons answered this question (41%), the largest areas needing improvement according to the respondents were "more thorough training" (32%) and "publicity about the programs" (24%). Nearly all respondents (97%) felt the programs were "pretty valuable" or "very valuable."

TABLE 4.13

Percentage of General Public Holding Jobs for Which They Were Trained in Vocational or Technical Programs; and Their Evaluation of the Quality of These Programs

	Percentage of Respondents, by Geographical Region, Indicating Such Training and Evaluating Programs				
	All	Piedmont	Pee Dee	Midlands	Low Country
	Are/were you in a job for which you had training?				
Yes	31	14	42	38	30
No	69	86	58	62	70
	If you had this training, to what extent did it help?				
Very Great Extent	49	38	40	59	46
Great Extent	19	38	20	10	23
Moderate	15	25	7	14	23
Slight	12	0	27	10	8
Not at All	5	0	7	7	0

CHAPTER V

BUSINESS AND INDUSTRY QUESTIONNAIRE

This chapter summarizes the results obtained from the questionnaire administered to South Carolina employers in business and industry. Following a description of the sample, questions relating to input, process, and output are discussed separately. Questions which did not yield important data are not discussed in this chapter. The reader interested in the results of all questions and reporting by subgroup and geographical region should refer to Appendix D.

Characteristics of the Sample

In order to obtain a fair and representative input from employers, a systematic sampling plan was designed. In summary, the sampling plan was designed to select employers in proportion to both the size of industries (four size stratums were used) and the type of industry (nine type stratums were used).

The actual sampling, mailing, and follow-up of these questionnaires was done by the South Carolina Employment Security Commission. A total of 2,543 questionnaires were mailed to employers. The data analyses were based upon a total of 1,165 questionnaires which were completed and returned.

The largest single category of respondents (30%) were manufacturers of non-durable goods (Table 5.1). The proportion of responses in each of the other categories was considerable smaller. In addition to representing the various types of businesses and industries in South Carolina, the sample was also representative of the various sizes of industry and was proportional to the population distribution in the various regions of the state.

Familiarity with programs. Most employers surveyed (88%) said they were familiar with technical and vocational education programs in South Carolina and 73% said students were trained in skills they could use. Nearly all (99%) said they were willing to hire qualified graduates who met their employment needs.

TABLE 5.1

Sample Characteristics

Type of Industry	Percentage of Respondents in Each Category
Construction	9
Manufacturing, durable goods	13
Manufacturing, non-durable goods	30
Transportation, communications and other public utilities	4
Wholesale trade	4
Retail trade	13
Finance, insurance, real estate	6
Public Administration	4
Total services	17
Full-Time Employment Level of Company	
1-9	17
10-49	29
50-249	33
over 249	21
Region of State	
Piedmont	34
Midlands	29
Pee Dee	17
Low Country	20

PROGRAM INPUT

This section focuses on the following input variables of the educational and employment processes:

- handicapped students
- sex bias

Handicapped Students

Employers were asked whether or not they thought handicapped students would have an advantage when applying for a job upon completion of their program (Table 5.2). Some employers (43%) felt that the handicapped would have a "slight" or "great advantage" when applying for jobs in South Carolina. The majority (57%) believed that there is either "no advantage" or a "slight" or "great disadvantage."

TABLE 5.2

Employers Evaluate the Advantage/Disadvantage of Handicapped Students in Applying for Job

Extent of Advantage/ Disadvantage	Percentage of Employers Indicating Each Extent of Advantage/Disadvantage
Great advantage	13
Slight advantage	30
No advantage	32
Slight disadvantage	21
Great disadvantage	4

Sex Bias

Overall, employers felt that in South Carolina men are generally hired for jobs traditionally held by men, and women are hired for jobs traditionally held by women (Table 5.3). A total of 63% of the employers felt this to be the case to either a "great" or "very great extent."

TABLE 5.3

Employers Evaluate Sexual Stereotyping in Employment

Extent of Stereotyping	Percentage of Employers Indicating That Men and Women are Hired for Jobs Traditionally Held by Men and Women
Very great extent	18
Great extent	45
Moderate extent	29
Small extent	7
Not at all	2

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EDUCATIONAL PROCESS

This section focuses on the following variable within the educational and employment processes:

- program update and modification

Program Update and Modification

In order for vocational and technical education programs to remain viable, they must be responsive to the needs of business and industry. However, 68% of the employers surveyed said they were seldom or never contacted by vocational centers for advice. Similarly, 59% said they were seldom or never contacted by technical education colleges.

Table 5.4 presents the responses of each type of industry when asked if they had been contacted by vocational centers. Manufacturers of durable and non-durable goods were contacted more frequently than were other types of industries. The transportation industry was contacted least often. Contact by technical education colleges was reported more frequently than contact by vocational centers, but the overall pattern across the various industries was similar.

TABLE 5.4

Employers Indicate the Frequency With Which They They Are Contacted by Vocational Centers for Advice

Type of Employer	Percentage of Employers Indicating Amount of Contact			
	Often	Occasionally	Seldom	Never
Construction	3	10	17	70
Manufacturing, durable goods	15	43	19	22
Manufacturing, non-durable goods	16	34	23	27
Transportation	0	5	15	80
Wholesale trade	3	5	15	77
Retail trade	6	13	13	68
Finance, insurance, real estate	2	7	20	71
Total services	4	18	16	62
Public administration	0	18	15	67
All respondents	8	23	18	50

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PROGRAM OUTPUT

This section focuses on the following output variables of the educational and employment processes:

- job placement success
- job placement activities
- quality of vocational education
- quantity of program graduates
- perception of strengths and weaknesses

Job Placement Success

Asked if they had hired graduates of vocational programs within the last two years (Table 5.5), the majority of employers surveyed (61%) said they had. Manufacturers of non-durable goods reported the highest rate of hiring graduates (85%); wholesale trade employers reported the least (36%).

Employers who had hired graduates most frequently (69% for vocational graduates and 73% for technical graduates) had generally hired from one to five within the last two years. Employers who had not hired any graduates within the last two years were asked why. Most said that either there was no demand (39%) or that none applied (44%). Very few of the employers (5%) felt that graduates lacked necessary skills.

The majority of vocational and technical students hired were placed in their area of training (Table 5.6). Half (51%) of the companies hiring vocational graduates said that over 75% of these new employees were placed in jobs for which they were trained. Similarly, 56% of the companies hiring graduates of technical colleges placed over 75% of these in jobs for which they were trained.

TABLE 5.5

Employers Indicate Whether They Have
Hired Program Graduates Within the Last Two Years

Type of Industry	Percentage of Employers Indicating That They Have/Have Not Hired Program Graduates Within The Past Two Years		
	Yes	No	I Don't Know
Construction	51	29	20
Manufacturing, durable goods	85	9	6
Manufacturing, non-durable goods	70	16	14
Transportation	48	39	13
Wholesale trade	36	52	11
Retail trade	40	44	16
Finance, insurance, real estate	40	32	29
Total services	64	29	8
Public administration	62	23	15
All respondents	61	26	13

TABLE 5.6

Employers Indicate the Percentages of Graduates Placed in Jobs For Which They Had Been Trained

Percentage of Graduates	Percentage of Employers Selecting Each Percentage of Graduates Placed in Jobs For Which They Had Been Trained	
	Vocational Graduates	Technical Graduates
1-25%	26	28
26-50%	16	9
51-75%	7	6
over 75%	51	56

Job Placement Activities

Employers said that nearly half of their first contacts with graduates were through school-related personnel or services (Table 5.7). Employers reported 43% of the vocational graduates and 38% of the technical graduates to be contacted in this manner. However, school placement services were credited with only 9% of the vocational graduate placements and 12% of the technical graduate placements.

Quality of Vocational Education

In order to evaluate the quality of vocational education programs, employers who had hired program graduates were asked about four of the employee's attributes: preparation in job skills, quality of work habits, attitudes toward work, and attendance records.

TABLE 5.7

Employers Indicate the Manner of Their Initial Contact with Graduates

Manner of Initial Contact	Percentage of Employers Indicating Each Manner of Initial Contact	
	Vocational Graduates	Technical Graduates
School guidance counselor	18	9
Instructor or supervisor	16	17
School placement services	9	12
Private placement agency	6	7
Friends	16	18
Student's initiative	24	22
Company personnel office	8	11
I don't know	5	4

Job skills. Technical students appear to be somewhat better prepared in the skills for which they were trained than vocational students (Table 5.8). Half (52%) of the respondents said vocational graduates were "well" or "very well prepared" while two-thirds (66%) said the technical graduates were "well" or "very well prepared."

Work habits. Asked to evaluate the work habits of graduates, employers again rated technical graduates somewhat higher than vocational graduates: 55% of the respondents felt the vocational graduates' work habits were "good" or "very good," 68% rated the work habits of the technical college graduates this highly.

TABLE 5.8

Employers Evaluate the
Job Skills of Graduates

Quality of Preparation	Percentage of Employers Selecting Each Degree of Preparation	
	Vocational Graduates	Technical Graduates
Very well prepared	14	28
Well prepared	38	38
Average preparation	41	28
Poorly prepared	6	3
Very poorly prepared	1	2

TABLE 5.9

Employers Evaluate the
Work Habits of Graduates

Quality of Work Habits	Percentage of Employers Selecting Each Quality of Work Habits	
	Vocational Graduates	Technical Graduates
Very good work habits	13	24
Good work habits	42	44
Average work habits	39	28
Poor work habits	5	3
Very poor work habits	0	1

Attitudes. The majority of employers rated the work habits of graduates as "good" or "very good." Technical graduates were again rated somewhat more highly than vocational graduates: 58% of the respondents felt that the attitudes of vocational graduates were either "good" or "very good;" while 71% of the respondents rated the attitudes of the technical graduates this highly.

Table 5.10

Employers Evaluate Graduates' Attitudes Toward Work

Attitude Toward Work	Percentage of Employers Selecting Each Quality of Work Attitudes	
	Vocational Graduates	Technical Graduates
Very good attitude	14	22
Good attitude	44	49
Average attitude	38	25
Poor attitude	4	3
Very poor attitude	0	1

Attendance records. The majority of employers rated the attendance records of graduates as "good" or "excellent." Again, technical graduates were rated somewhat more highly.

TABLE 5.11

Employers Evaluate the
Attendance Records of Graduates

Attendance Record	Percentage of Employers Selecting Each Description of Attendance Records	
	Vocational Graduates	Technical Graduates
Excellent	13	26
Good	50	48
Average	34	24
Poor	4	1
Very Poor	0	0

Quantity of Program Graduates

Employers were asked to identify those areas in which there was the greatest present and future need for graduates.

Areas of present and future need. Employers (60%) rated the area of office occupations as the easiest in which to find trained personnel (Table 5.12). No other employment area was seen as having a surplus of workers. Nearly a quarter of the employers felt that it was most difficult to find trained personnel for industrial trades, such as tool and die fabrication, pipefitting, and welding.

With regard to future needs, 23% of the employers felt the most demand in the future would be in the area of industrial trades; 17% felt the textile industry would have the most need and 16% saw such a demand for trained personnel for office occupations.

Perception of Strengths and Weaknesses

Vocational and technical education programs were viewed by employers as having nearly identical strengths and weaknesses (Table 5.13). "Responsiveness to business and industry" and "good teaching" were seen to be the primary strengths and "poor job preparation" was seen as the primary weakness.

TABLE 5.12

Employers Identify Those Business and Industrial Areas in Which It Is Presently Easiest or Most Difficult to Find Graduates and in Which There Is the Greatest Perceived Future Need for Graduates

Business or Industrial Areas	Percentage of Employers Indicating Each Condition of Supply and Demand for Graduates		
	Hard to Find Help	Easy to Find Help	Future Need
Office occupations	8	60	16
Marketing/sales	6	2	4
Agriculture	2	1	2
Mechanics	6	3	7
Engineering	13	3	9
Graphic arts	4	1	3
Computers	7	2	2
Allied health	5	4	8
Electronics	2	*	2
Building trades	6	3	5
Industrial trades	24	8	23
Textiles	13	9	17
Other	4	4	2

* less than 1%

TABLE 5.13

Employers Rate the Primary Strengths and Weaknesses of Vocational and Technical Education Programs

	Percentage of Employers Indicating Each Area of Strength or Weakness	
Primary Strength	Vocational Programs	Technical Programs
Good Teaching	26	23
Low Cost	5	6
Accessibility	11	12
Varied Curriculum	14	12
Responsiveness to Business and Industry	33	34
Good Facilities	1	3
Job Placement Services	1	3
Other	8	7
Primary Weakness	Vocational Programs	Technical Programs
Poor Teaching	9	8
Poor Job Preparation	22	22
Not Responsive to Business and Industry	7	7
Poor Course Offerings	10	10
Poor Image	9	6
Lack of Facilities	2	3
Poor Counseling	8	10
Poor Articulation	2	3
Unfair Advantage	1	1
Other	31	29

RESULTS RELATING TO INPUT

This section focuses on such input variables of the educational process as:

- handicapped students
- facilities
- sex bias
- program availability

Handicapped Students

Students were asked if they had a handicap and if so was it a problem for them at their school (Table 6.3).

TABLE 6.3

Percentage of Students Indicating That They Have a Physical Handicap, and, if so, That The Handicap is a Problem at School

	Percentage of Respondents, by Subgroup				
	High School Non-vocational	High School Vocational	TEC	Adult Vocational	All
Do you have a physical handicap					
Yes	2	3	8	6	4
No	98	97	93	94	96
Has your handicap been a problem for you at school					
Yes	33	25	54	11	33
No	67	75	46	89	67

CHAPTER VI

STUDENT QUESTIONNAIRE

This chapter summarizes the results obtained from the questionnaire administered to South Carolina students. Following a description of the characteristics of the sample, questions relating to input, process, and output are discussed separately. Questions which did not yield important data are not discussed in this chapter. The reader interested in the results of all questions and reporting by subgroup and geographical region should refer to Appendix D.

Characteristics of the Sample

A total of 957 students were surveyed (Table 6.1). Of these, 25% were enrolled in non-vocational high school programs, 30% were in high school vocational programs, 22% were adult vocational students, and 22% were from technical institutions. The geographical distribution reflected the population distribution of the state (Table 6.2). The largest number of female respondents were in the adult vocational group (66%), the largest number of males were in the TEC (64%) and high school vocational (56%) groups. The high school vocational group had the largest number of minority respondents (56%) while TEC (23%) and adult vocational (26%) groups had the fewest minority respondents. Over half of the TEC (58%) and adult vocational (59%) had full-time jobs, while about one-third of the high school non-vocational (35%) and high school vocational (31%) had part-time

TABLE 6.1

Sample Characteristics

Percentage of Respondents, by Subgroup, Selecting Each Characteristic

	High School Non-vocational	High School Vocational	TEC	Adult Vocational	All
What is your sex					
Male	45	56	64	34	50
Female	55	44	36	66	50
What is your age					
15-20	86	93	22	14	58
21-34	8	5	55	49	27
over 34	6	1	23	37	15
What is your ethnic background					
White	62	44	77	74	63
Minority	38	56	23	26	37
What is your current student status					
Full-time	91	87	60	29	70
Part-time	9	13	40	71	30
What is your employment status					
Full-time	17	10	58	59	33
Part-time	35	31	15	13	24
Unemployed, seeking work	27	40	16	12	25
Unemployed, not seeking work	22	18	11	15	17
What do you plan to do after completing your present program of study					
Four year college	41	22	21	9	24
Technical college	20	28	8	6	17
Two year college	10	8	2	5	6
Full-time job	14	26	28	21	22
Part-time job	7	4	3	7	4
Different job	1	2	8	16	6
Continue present job	3	3	22	28	13
Other	9	7	10	8	8

jobs. Forty percent of the high school vocational students were seeking work.

After completing their present program of study almost half (41%) of the high school non-vocational students said they would go on to a four year college. Over one fifth of the high school vocational (22%) and TEC (21%) students said they would go on to a four year college. Twenty percent of the high school non-vocational students and 28% of the high school vocational students said they would go on to a technical institution. Only one quarter of the high school vocational students (26%), TEC (28%) students, and adult vocational (21%) students said they were planning on taking a full-time job on completion of their program. One quarter of the TEC students (22%) and adult vocational students (28%) said they were going to continue in their present job.

TABLE 6.2

Geographical Distribution of Sample
Compared to State Population Distribution

Geographical Region	Percentage of Sample	State's Population Distribution
Piedmont	25	28
Pee Dee	18	15
Midlands	34	32
Low Country	22	25

Facilities

Students were asked the extent to which they thought school buildings met the needs of the programs they were in. They were also asked how up-to-date they thought the equipment and materials they were using in their program were (Table 6.4).

TABLE 6.4

Extent to Which Students Perceive That School Buildings and Equipment and Materials Meet Program Needs

	Percentage of Respondents, by Subgroup				
	High School Non-vocational	High School Vocational	TEC	Adult Vocational	All
Extent to which school buildings meet program needs					
Very great extent	15	14	16	40	20
Great extent	30	40	42	35	37
Moderate extent	36	34	33	22	32
Small extent	15	9	7	3	9
Not at all	5	3	3	1	3
Extent to which equipment and materials are up-to-date					
Newest available	10	20	19	32	20
Mostly up-to-date	69	72	66	62	68
Mostly out-of-date	12	4	9	2	7
Entirely out-of-date	3	0	1	1	1
None needed	7	4	6	3	5

With regard to the school buildings, 57% of the students felt the buildings were adequate to a "great" or "very great extent." Adult vocational students thought facilities met needs more than the other respondent groups. However, 28% felt them to be adequate to only a "moderate extent" or less.

Looking at equipment and materials, 88% of the students felt these to be either "mostly up-to-date" or the "newest possible." As in the question about facilities, adult vocational students rated equipment and materials more highly than did the other respondent groups.

Sex Bias

When asked if their schools' admission policies discriminated against either sex or if vocational and technical education materials were fair to both sexes, only 3% of the students felt males were not treated fairly and 4% felt females were not treated fairly. Most students (88%) felt school materials to be at least moderately fair to both sexes (for Tables, see Appendix D).

Program Availability

Students were asked if they were in the program of their choice (Table 6.5) and how they entered the program in which they were enrolled.

Of the students in high school vocational programs, 87% were in the program of their choice while 75% of the technical education students were in the program of their choice. Nearly all students (93%) chose their program of study themselves. Of the various vocational and technical groups, the group in which the lowest percentage of students chose their program was high school vocational students and even here the figure was 90%.

TABLE 6.5

Students Indicate Whether or Not They Are in the Vocational Program of Their Choice

In Program of Choice	Percentage of Respondents, by Subgroup, Indicating Whether or Not They Are in the Program of Their Choice			
	High School Vocational	Technical Education	Adult Education	All
Yes	87	74	96	87
No	13	25	4	13

TABLE 6.6

Students Indicate How They Entered Their Present Program

Means of Entering Program	Percentage of Students, by Subgroup, Indicating Each Means of Entering Their Vocational Programs			
	High School Vocational	Technical Education	Adult Education	All
Chose my own program	90	98	95	94
Placed by school	8	1	4	5
Parents selected program	1	1	1	*

* less than 1%

RESULTS RELATED TO PROCESS

This section focuses on such variables within the educational process itself as:

- student counseling and guidance services
- pre-vocational opportunities
- articulation between academic and vocational programs
- articulation between vocational and technical programs
- counseling procedures and teacher attitudes

Student Counseling/Guidance Services

Students were asked if their schools provided guidance services, if they had ever used the services, what type of service they were seeking, and whether or not they found the experience helpful (Table 6.7).

Nearly all the schools surveyed offered some sort of guidance services and over 80% of all high school students (both vocational and non-vocational) made use of these services. However, a large percentage of both adult vocational students (78%) and TEC students said that they had not made use of these services.

Students using the services were most often seeking educational counseling/guidance and almost all (93%) found the experience helpful.

Prevocational Opportunities

Students were asked if they had taken prevocational courses prior to this year (Table 6.8), and if these courses had helped them decide upon an occupation (Table 6.9). More high school vocational students (75%) had

TABLE 6.7

Students Indicate the Availability, Type, and Effectiveness of Counseling/Guidance Services

Percentage of Students, by Subgroup					
	High School Non-vocational	High School Vocational	TEC	Adult Vocational	All
Does your school provide guidance services?					
Yes	97	98	95	86	95
No	3	2	5	14	5
Have you ever used the services?					
Yes	86	83	55	22	
No	14	17	45	78	
What type of services were you seeking?					
Personal-social guidance	8	9	3	2	6
Educational guidance	76	58	39	10	48
Vocational guidance	2	15	3	10	8
Job placement	4	8	14	9	9
Other	3	4	3	2	3
Did you find the experiences helpful					
Yes	93	96	92	89	93
No	8	4	8	11	7

taken at least one of these courses than had respondents from other groups. Few TEC (22%) and adult vocational (27%) students had reported taking prevocational courses. Among the respondent groups, high school vocational students (64%) and TEC students (52%) who had taken these courses reported most often that the courses had helped them decide on a future occupation.

TABLE 6.8

Students Indicate Pre-vocational Courses They Had Taken Prior to the Year of the Survey

Type of Course	* Percentage of Respondents, by Subgroup, Selecting Each Type of Course				
	High School Non-vocational	High School Vocational	TEC	Adult Vocational	All
Industrial Arts	6	12	8	4	8
Pre-vocational	19	49	6	6	23
Home Economics	33	29	10	14	22
None of these	48	25	78	73	53

* Percentages from this Table could add up to more than 100% since students could have taken more than one course.

TABLE 6.9

Students Who Took Pre-vocational Courses Indicate Whether or Not Such Courses Helped Them to Decide Upon An Occupation

Response	Percentage of Respondents, by Subgroup, who Took Pre-vocational Courses Indicating Whether Such Courses Helped Them Decide Upon a Career				
	High School Non-vocational	High School Vocational	TEC	Adult Vocational	All
Pre-vocational courses did help	27	64	52	44	50
Pre-vocational courses did not help	73	36	48	56	50

Articulation Between Academic and Vocational Programs

In order to determine how effective articulation is between vocational/technical programs and other components of the educational process, students were asked how well prepared they thought they were in basic skills such as reading, writing, and arithmetic for their vocational or technical education courses (Table 6.10).

Most vocational students (93%) and technical students (86%) felt they were "pretty well" or "very well prepared" for the programs in terms of basic reading, writing, and arithmetic skills.

TABLE 6.10

Students' Perceptions of How Well Prepared They are in Basic Skills

Extent of Preparation	Percentage of Vocational and Technical Students Indicating Each Extent of Preparation	
	Vocational Students	Technical Students
Very well prepared	42	39
Pretty well prepared	51	46
Not very well prepared	5	15
Not at all prepared	3	1

Articulation Between Vocational and Technical Programs

TEC students were also asked how well they thought vocational courses they had taken prepared them for their TEC program (Table 6.11) Over eighty percent (81%) of the technical education students who had taken vocational programs felt they were "pretty well" or "very well prepared" in terms of their vocational background (Table 6.11). Over half of the students (58.5%) had no vocational background (see Appendix D).

TABLE 6.11

Students' Perceptions of How Well Prepared They Are in Terms of Vocational Background

Extent of Preparation	Percentage of Vocational Students Indicating Each Extent of Preparation
	Technical Students
Very well prepared	25
Pretty well prepared	56
Not very well prepared	6
Not at all prepared	13

Counseling Procedures and Teacher Attitudes

Students were asked how they had become aware of vocational or technical programs (Table 6.12). Only 13% of the students surveyed were not familiar with vocational education and only 17% were not familiar with technical education in South Carolina. More had become aware of vocational programs through guidance counselors (33%) or friends (24%) than through other means. Familiarity with technical education programs was attained primarily via the schools' publications (24%), guidance counselors (22%), and friends (19%).

TABLE 6.12

Students Indicate How They Became Aware of Vocational and Technical Programs

Means of Becoming Aware	Percentage of Vocational and Technical Students Indicating Each Means of Becoming Aware of Vocational and Technical Programs	
	Vocational Students	Technical Students
School's publications	17	24
Newspapers	10	12
Guidance counselors	33	22
Friends	24	19
Other	3	6
Not familiar with program	13	17

When asked about educator attitudes, nearly all students (96%) felt that their teachers and counselors had a "positive attitude" toward vocational and technical education programs (Table 6.13). A larger number of adult vocational students (92%) said their teachers had a "positive attitude" than did other respondent groups. High school non-vocational students (61%) reported the lowest percentage of "positive" teacher attitudes. Most students (89%) also feel that these attitudes have had at least a moderate impact on their own feelings toward school.

Table 6.13

Students Evaluate the Attitudes of Teachers and Counselors Toward Vocational and Technical Programs and the Effects of These Attitudes on Students' Feelings Toward School

	Percentage of Respondents, by Subgroup				
	High School Non-vocational	High School Vocational	TEC	Adult Vocational	All
	Attitudes of teachers and counselors toward vocational and technical programs				
Very positive	61	74	73	92	74
Slightly positive	32	24	22	8	22
Slightly negative	6	2	5	0	3
Very negative	1	0	0	0	0
	Extent to which teacher and counselor attitudes affect student feelings toward school				
Very great extent	20	27	34	51	32
Great extent	34	38	31	35	35
Moderate extent	30	24	21	10	22
Slight extent	10	6	8	0	6
Not at all	7	6	5	4	6

RESULTS RELATING TO OUTPUT

This section focuses on such output variables of the educational process as:

- job placement activities
- quality of graduates' education
- strengths and weaknesses of the programs

Job Placement Activities

Students were asked whether job placement activities were available at their schools and if so, what types of services were available (Table 6.14. This table shows results for high school vocational, TEC, and adult vocational students only, since job placement for high school non-vocational sutdents is not a concern of the vocational or technical programs). More TEC students (83%) than high school vocational (61%) or adult vocational (50%) students said that their institutions offered job placement services. Almost half of the adult vocational students (45%) and over one quarter of the high school vocational students (28%) did not know if job placement services were available.

The services most frequently provided to TEC students were job listings (41%) and job placement services (40%). High school vocational students reported vocational counseling (39%) and job listings (22%) and adult vocational students reported vocational counseling (26%) and job placement services (23%) most frequently. A larger percentage of TEC students (43%) reported not knowing what types of services were available than other respondent groups.

TABLE 6.14

Students Indicate the Availability and Nature of Placement Services Available at Their Schools

Percentage of Respondents, by Subgroup				
	High School Vocational	TEC	Adult Vocational	All
Are there placement services available at your school				
Yes	61	83	50	63
No	11	3	5	7
I don't know	28	14	45	30
*** What types of services are available**				
Vocational counseling	39	27	26	31
Job listings	22	41	18	26
On-campus employer visits	13	23	9	15
Job placement services	17	40	23	25
I don't know	29	43	9	28

* Percentages for this question add up to more than 100% as respondents checked as many as applied to their program.

Quality of Graduates' Education

Students were asked how well they thought their programs were preparing them for a future employment or education; to what extent the programs were preparing them for the job they wanted; and how well prepared their teachers were on a daily basis (Table 6.15).

Nearly all students (91%) felt they were being "pretty well" or "very well" prepared for future employment or education. More adult vocational students (63%) reported being "very well prepared" than did other students. The results for job preparation show that 85% of the students felt their program was preparing them at least to a "moderate extent" for the job they wanted. More high school non-vocational students (19%) thought they were being prepared to a "small extent" than other groups. Almost all (97%) of the students felt their teachers were "usually" or "always prepared" for class.

Strengths and Weaknesses of the Programs

Students were asked to list their perception of the strengths and weaknesses of the vocational and technical systems (Table 6.16). Good teaching (26% vocational and 22% TEC) and responsiveness to business and industry (28% vocational and 25% TEC) were listed most often as strengths of the vocational and technical programs. No particular weaknesses were listed by a large percentage of students. Strengths and weaknesses categories under "Other" included over 20 different areas, none of which were listed more than three times.

TABLE 6.15

Students Evaluate the Effectiveness of Their Programs and Teachers

Percentage of Respondents, by Subgroup

	High School Non-vocational	High School Vocational	TEC	Adult Vocational	All
How well is your program preparing you for future employment or education					
Very well	20	39	37	63	39
Pretty well	61	56	56	31	52
Not very well	15	4	5	4	7
Not at all	3	1	2	2	2
To what extent is your program preparing you for the job you want					
Very great extent	23	28	22	41	30
Great extent	23	36	41	31	34
Moderate extent	19	22	30	14	21
Small extent	19	10	5	4	8
Not at all	8	2	1	3	2
I don't know	8	3	2	8	4
How well prepared are your teachers on a daily basis					
Always prepared	46	51	45	80	55
Usually prepared	50	48	51	19	42
Usually not prepared	3	*	2	1	2
Never prepared	*	1	2	1	1

* less than 1%

TABLE 6.16

Students Evaluate the Major Strengths and Weaknesses of Vocational and Technical Programs in South Carolina

	Percentage of Respondents, by Subgroup	
	Vocational Programs	Technical Programs
What is the major strength of vocational and technical programs in South Carolina		
Good teaching	26	22
Low cost	3	7
Accessibility	7	4
Curriculum variety	8	16
Responsiveness to business and industry	28	25
Good facilities	2	4
Job placement services	4	4
Other	21	17
What is the major weakness of vocational and technical programs in South Carolina		
Poor teaching	14	16
Poor job preparation	3	5
Not responsiveness to business and industry	*	1
Poor course offerings	11	14
Poor image	6	2
Inadequate facilities	10	7
Poor counseling	6	5
Lack of varied courses	4	5
Inadequate funding	7	6
Not a four-year degree	1	5
Other	34	33

* Less than 1%

Results by Sex and Region

Student results were also analyzed by sex and by region. If the reader is interested in these results, refer to Appendix D.

CHAPTER VII

EDUCATOR QUESTIONNAIRE

This chapter summarizes the results obtained from the questionnaire administered to South Carolina educators. Following a description of the characteristics of the sample, questions relating to input, process, and output are discussed separately. Questions which did not yield important data are not discussed in this chapter. The reader interested in the results of all questions and reporting by subgroup and geographical region should refer to Appendix D.

Characteristics of the Sample

To ensure representative feedback the professional educators surveyed in this study were grouped into the following subcategories: public school educators at the local level; technical educators at the local level; public school educators at the state level; and technical educators at the state level. Sampling from the various regions of the state was done in proportion to the population distribution of the state.

Among the 729 educators surveyed there was nearly a two-to-one ratio of men (64%) to women (36%). Most of the educators were teachers (61%) or administrators (32%). Only about 6% of the educators surveyed held different types of positions. Half (48%) of the educators worked primarily in high schools with vocational education programs, while one-fourth (26%)

worked with technical education centers or (17%) with vocational education centers. Only a few (1%) worked in high schools without vocational programs or held state-level administrative positions (7%).

INPUT TO EDUCATIONAL PROCESS

This section focuses upon the following input variables of the educational process:

- awareness of policy and regulation
- programs for handicapped students
- facilities
- advisory committees
- staff development
- sex bias
- program relevance
- program availability

Awareness of Policy and Regulation

In order to determine the educators' level of awareness of the state policies and guidelines related to vocational education, the educators were asked the extent to which they were familiar with the *Defined Minimum Program for South Carolina School Districts*. In general, most were not very familiar with this document. Only 38% reported that they were familiar with it to a "great" or "very great extent" and 17% that they were "moderately" familiar with the document. Almost half (45%) were either familiar only to a "small extent" or "not at all" with this basic policy document.

Handicapped Students

Educators were surveyed as to the presence and effectiveness of programs to aid the handicapped students in their job placement activities.

Two-thirds of educators surveyed (66%) said their schools did NOT have special programs or guidelines for the placement of handicapped students. Asked about the effectiveness of these special programs, only 15% of the educators with such programs reported them to be "very successful"; however, 76% reported them to be "moderately successful." The remaining 9% felt that their programs were "moderately" or "very unsuccessful."

The most frequent services provided by these programs were setting up interviews with employers and counseling individual students on how to conduct job interviews. However, only about 14% of the educators reported that their schools were providing these services. Only 10% of the educators said that their schools actively sought employers with a record for hiring the handicapped.

Facilities

Most educators felt their buildings, equipment and materials were adequate for the educational programs they were offering—with materials and equipment rated somewhat more highly than buildings. When asked the extent to which school buildings meet the needs of the education programs being offered (Table 7.1), over half (55%) of the vocational and technical instructors responding said either to a "great" or "very great extent"; one-third

(34%) said to a "moderate extent"; only 11% felt the buildings served the needs of the programs to only a "small extent" or "not at all." Most vocational and technical instructors (87%) felt that the equipment and materials used in their programs were either the "newest available" or "mostly up-to-date." (Table 7.2)

TABLE 7.1

Extent to Which Instructors Perceive That Their Buildings Serve Program Needs

Type of Instructor	Percent of Responding Group Selecting Each Extent of Servicability				
	Very Great	Great	Moderate	Small	Not at All
Vocational	20	34	33	12	0
Technical	20	35	34	9	1

TABLE 7.2

Extent to Which Instructors Perceive Their Equipment and Materials as Obsolescent

Type of Instructor	Percent of Responding Group Selecting Each Degree of Obsolescence				
	Newest Available	Mostly Up-to-Date	Mostly Out-of-Date	All Out-of-Date	None Needed
Vocational	14	75	11	0	1
Technical	11	73	15	1	1

State Produced Instructional Materials. Asked if they used state-produced instructional materials (Table 7.3), 84% of the vocational instructors replied that they did, but only 28% of the technical instructors did. The difference in the responses of vocational and technical educators to this question is no doubt attributable to the fact that these materials are developed specifically for vocational educators. These materials were often used as supplemental course materials (34%), reference materials (13%), or guidelines for the development of course outlines (25%). Nearly all respondents (91%) felt that the state-produced materials were as good as, if not better than, other available materials (Table 7.4).

TABLE 7.3

Percentage of Instructors Using State-Produced Instructional Materials

Type of Instructor	Percentage of Instructors Who Use Materials	
	Yes	No
Vocational	84	16
Technical	28	72

TABLE 7.4

Instructors Compare the Quality of State-Produced Instructional Materials to That of Other Available Materials

Type of Instructor	Percentage of Instructors Selecting Each Category Comparing State-Produced Instructional Materials to Other Available Materials					
	Much Better	A Little Better	About the Same	A Little Worse	Much Worse	None Comparable Are Available
Vocational	19	25	47	4	1	4
Technical	20	19	52	2	0	7

Advisory Committees

One component of each vocational education center's and technical institution's program is the Advisory Program Committee. The role of this group, composed primarily of representatives of local business and industry, is to provide input on present and future program development. When asked about the effectiveness of these advisory committees (Table 7.5), over three-fourths of both vocational educators (75%) and technical educators (87%) felt that the Committees contributed to their programs to at least a "moderate extent."

TABLE 7.5

Instructors Evaluate Extent to Which Program Committees Contribute to Vocational Programs

Type of Instructor	Percentage of Instructors Selecting Each Extent of Contribution				
	Very Great	Great	Moderate	Small	Not at All
Vocational	11	27	37	17	8
Technical	21	36	30	7	6

Staff Development

Educators were asked about the availability and effectiveness of teacher training courses and the availability of professional development and/or graduate courses. While almost three-fourths (72%) of the vocational instructors indicated that vocational teacher training courses were available to a "moderate," "great," or "very great extent" (Table 7.6), less than half (39%) of the technical teachers indicated a similar availability for technical teacher training courses. Asked the extent to which teacher training courses helped to keep teachers up-to-date regarding program needs (Table 7.7), 92% of the vocational educators responding indicated that such courses did help—to a "small" (22%), "moderate" (39%), "great" (27%) or "very great" (6%) extent. Technical instructors were generally less enthusiastic, with three-fourths of those responding indicating that the courses helped to some extent, and one-fourth indicating that the courses did not help at all.

The availability of professional development or graduate courses was rated slightly more highly than that of teacher training courses (Table 7.8), with almost three-fourths (76%) of vocational instructors and over half (61%) of the technical instructors indicating at least a "moderate" degree of availability.

TABLE 7.6

Instructors Evaluate the Availability of Vocational and Technical Teacher Training Courses

Type of Instructor	Percentage of Instructors Selecting Each Extent of Availability				
	Very Great	Great	Moderate	Small	Not at All
Vocational (Evaluated by Vocational Instructor)	11	24	37	18	10
Technical (Evaluated by Technical Instructors)	4	8	27	38	24

TABLE 7.7

Instructors Evaluate the Extent to Which Teacher Training Courses Help Keep Teachers Up-To-Date with Program Needs

Type of Instructor	Percentage of Instructors Selecting Each Extent to Which Courses Help Keep Teachers Up-to-Date				
	Very Great	Great	Moderate	Small	Not at All
Vocational	6	26	39	22	8
Technical	4	14	26	30	26

TABLE 7.8

Instructors Evaluate the Accessibility of Professional Development or Graduate Courses

Type of Instructor	Percentage of Instructors Selecting Each Extent of Accessibility				
	Very Great	Great	Moderate	Small	Not at All
Vocational	11	26	39	20	5
Technical	7	21	33	32	6

Sex Bias

The majority of educators felt that men and women have equal access to vocational and technical education programs (Table 7.9). Moreover, a majority also felt that the same recruitment procedures are used for both males and famales (Table 7.10). These views are consistent with those expressed by the students themselves (see Chapter VI). However, as noted in Chapter V, employers themselves felt that businesses and industries in South Carolina still tend to hire and place graduates according to traditional sex roles.

TABLE 7.9

Instructors Evaluate the Extent to Which Males and Females Have Equal Access to Vocational and Technical Programs

Type of Instructor	Percentage of Instructors Selecting Each Extent of Accessibility				
	Very Accessible	Easily Accessible	Not Easily Accessible	Unaccessible	Don't Know
Vocational (Evaluated by Vocational Instructors)	50	35	12	2	1
Technical (Evaluated by Technical Instructors)	71	24	3	2	0

TABLE 7.10

Instructors Evaluate the Extent to Which Recruitment Procedures for Vocational and Technical Programs Are the Same for Males and Females

Type of Instructor	Percentage of Instructors Selecting Each Extent of Equality				
	Very Great	Great	Moderate	Small	Not at All
Vocational (Evaluated by Vocational Instructors)	37	35	21	6	2
Technical (Evaluated by Technical Instructors)	53	32	9	5	1

Program Relevancy

In order for educational programs to be up-to-date and relevant to present and future employment needs, they must be reviewed and revised periodically. When asked how often their program content was reviewed and compared with the needs of business and industry (Table 7.11), over three-fourths of the vocational (76%) and technical (84%) groups indicated that their program contents were reviewed at least annually; the remaining respondents in both groups said this was done less frequently. It should also be noted that in response to open-ended questions, many educators commented that it was very difficult to end a program once it had begun.

Finally, when asked if these program reviews included meetings with representatives of business and industry, 66% of the educators said "Yes," 8% said "No," and 26% did not know.

TABLE 7.11

Instructors Indicating How Often Their Program Contents Are Reviewed

Type of Instructor	Percentage of Instructors Selecting Each Frequency of Review				
	Quarterly	Semi-Annually	Annually	Bi-Annually	Less Frequently
Vocational	6	8	62	3	20
Technical	19	17	48	4	12

Program Availability

A problem often encountered in educational programs is overenrollment and the consequent inaccessibility of the programs for some students. However, over 90% of vocational and technical educators felt that, in terms of enrollment openings, their programs were "easily" or "very accessible" (Table 7.12).

TABLE 7.12

Instructors Evaluate the Accessibility of Their Programs in Terms of Enrollment Openings

Type of Instructor	Percentage of Instructors Selecting Each Degree of Accessibility				
	Very Accessible	Easily Accessible	Not Easily Accessible	Unaccessible	Don't Know
Vocational (Evaluated by Vocational Instructors)	45	41	8	0	6
Technical (Evaluated by Technical Instructors)	58	38	2	0	3

THE EDUCATIONAL PROCESS

This section focuses on the following variables within the educational process itself:

- innovative and model programs
- articulation among various educational institutions and programs

Innovative and Model Programs

When asked about the development of new programs designed to serve new and emerging occupations (Table 7.13), only 29% of the vocational educators and 58% of the technical educators surveyed said their schools were developing such programs to a "great" or to a "very great extent." Another 42% of the vocational instructors and 29% of the technical instructors felt that such programs were being developed to only a "moderate extent," and 29% of the vocational and 13% of the technical instructors felt that such development was taking place to a "small extent" or "not at all."

Recall that the preceding section noted that while most educators reported that their educational programs were reviewed annually and compared with the needs of business and industry, 20% of the educators indicated that their programs were reviewed less frequently. Taken together, these results point to the fact that about one-fifth of the educators surveyed indicated that existing programs were reviewed only every two years or less frequently and that innovative or model programs were being developed to only a "small extent" or "not at all."

TABLE 7.13

Instructors Evaluate Extent to Which New Programs Are Being Developed to Meet Business Needs

Type of Instructor	Percentage of Instructors Selecting Each Extent of New Program Development				
	Very Great	Great	Moderate	Small	Not at All
Vocational	5	24	42	20	9
Technical	13	45	29	11	2

Articulation

Articulation here refers to the level of interaction and cooperation between various educational institutions and programs. A high level of articulation should ensure both a smooth transition by students from one program to another and the elimination of redundancy in program content. The effectiveness of this articulation was assessed by asking educators about the academic (reading, writing, and arithmatic) preparation of students for vocational or technical education programs and about the adequacy of the technical college student's preparation in vocational courses.

The academic preparation of vocational and technical students was not rated highly (Table 7.14): while over half of the respondents selected "moderately prepared" to describe their students, less than 10% of the respondents for vocational and technical programs described their students as "well" or "very well" prepared. And over one-third (40%) of the vocational instructors and one-half (50%) of the technical instructors described their students as "poorly" or "very poorly" prepared.

TABLE 7.14

Instructors Evaluate How Well Students in Vocational and Technical Programs Are Prepared in Basic Skills

Type of Instructor	Precentage of Instructors Selecting Each Degree of Preparation				
	Very Well	Well	Moderate	Poor	Very Poor
Vocational (Evaluated by Vocational Instructors)	1	7	57	29	7
Technical (Evaluated by Technical Instructors)	1	5	44	39	11

The vocational preparation, however, of students entering technical programs was rated more highly than their academic preparation (Table 7.15). One-third (33%) of the technical educators felt that their students were either "well" or "very well prepared" for the programs. Only 17% felt their students were "poorly" or "very poorly" prepared.

TABLE 7.15

Instructors Evaluate How Well Technical Students Are Prepared in Vocational Background

Type of Instructor	Percentage of Instructors Selecting Each Degree of Preparation				
	Very Well	Well	Moderate	Poor	Very Poor
Vocational	7	42	45	5	1
Technical	3	26	53	10	7

EDUCATONAL PROGRAM OUTPUT

This section focuses on the following output variables of the educational process:

- job placement
- perceptions of vocational education
- present and future demand for graduates
- perceived strengths and weaknesses

Job Placement

In order to obtain an index of the success of the educational process in training and placing students in jobs in business and industry, educators were asked what percentage of their students found jobs in the area of their training (Table 7.16). Overall, technical programs were seen to have a substantially higher graduate placement rate than vocational programs, with the average estimate of 74% placement as compared with a 46% estimate for vocational programs. Surprisingly, well over one-third of the educators did not know what percentage of graduates found jobs in their area of training. This is especially interesting in light of the fact that three-fourths of the educators surveyed said their school gathered follow-up data on graduates

TABLE 7.16

Instructors Estimating What Percentage of Graduates Obtain Jobs in Their Area of Training

Type of Instructor	Percentage of Instructors Selecting Each Estimated Percentage of Graduates Obtaining Jobs in Their Area of Training					
	0-20%	21-40%	41-60%	61-80%	81-100%	Don't Know
Vocational	8	14	18	11	4	45
Technical	1	4	6	23	30	36

Perceptions of Vocational Education

In the past, vocational education programs have been viewed as depositories for students who were not successful in the traditional academic programs. However, the data generated by the survey indicates that vocational education is currently viewed favorably by both school counselors and teachers. When asked to characterize the attitudes of the counselors in their institutions toward vocational/technical education (Table 7.17), the majority (86%) of the respondents felt these attitudes were either "moderately" or "very positive." A similar percentage felt that teachers held equally positive views.

Asked what types of services were offered by their guidance programs (Table 7.18), approximately three-fourths of the respondents indicated "vocational" and "educational counseling" and over half indicated "personal counseling." Two-thirds of the technical instructors but only one-third of the vocational instructors indicated that "job-placement" services were available. Only 2% of all respondents said they had no guidance program.

TABLE 7.17

Instructors Evaluate Attitudes of Counselors and Other Teachers Toward Vocational/Technical Education

Group Being Evaluated	Percentage of Instructors Selecting Each Attitude					
	Very Positive	Moderately Positive	Neutral	Moderately Negative	Very Negative	Don't Know
COUNSELORS						
Evaluated by Vocational Instructors	52	33	6	3	1	5
Evaluated by Technical Instructors	62	26	6	1	0	6
OTHER TEACHERS						
Evaluated by Vocational Instructors	40	45	7	4	1	3
Evaluated by Technical Instructors	67	28	3	1	1	1

TABLE 7.18

Instructors Indicate What Types of Services Are Offered by Their Guidance Programs

Type of Instructor	Percentage of Instructors Indicating the Availability of Each Service					
	Personal Counseling	Educational Counseling	Vocational Counseling	Job Placement Services	Other Services	No Guidance Program Available
Vocational	57	71	75	36	2	2
Technical	59	77	71	67	5	1

Present and Future Demand for Graduates

In order for vocational and technical programs to provide skilled workers for local businesses and industries, educators must have a clear understanding of the current and anticipated needs of employers. To determine if such an understanding exists, educators were asked three questions concerning employer needs: which area of employment had a surplus of skilled workers, which area had a current shortage of workers, and which area would have the greatest need for workers in the future.

For each of these three inquiries, the educators were to select their responses from a list of 17 different employment areas (e.g., "graphic arts," "allied health," "textiles") which were felt to be representative of nearly all employment needs. Table 7.19 gives the percentage of respondents for each question who selected each job category. As can be seen, educators felt that "office occupations" is the one area in which there is currently an excess of trained workers. "Engineering" and "industrial trades" were the areas most often identified as being insufficiently supplied with graduates, with "allied health" and "office occupations" receiving relatively high ratings.

When asked in what area of business and industry they anticipated future demands, vocational educators ranked "office occupations" highest (26%) and "building trades" next (19%). Technical educators ranked both "engineering" (18%) and "computers" (18%) as areas of future demand. "Industrial trades" was another area in which a high future demand was anticipated.

TABLE 7.19

Instructors Indicate Areas in Which the Number of Trained Graduates Most Often Exceeds Employment Demands, Falls Short of Employment Demands, and in Which They Anticipate the Greatest Future Demand

Occupational Area	Percentage of Instructors, by Type, Selecting Each Occupational Area as Most Often Having an Excess or Shortage of Graduates or Having the Greatest Anticipated Future Demand for Graduates					
	Number of Trained Graduates Most Often Exceeds Demand		Number of Trained Graduates Most Often Falls Short of Demand		Greatest Anticipated Future Demand for Graduates	
	Vocational Instructors	Technical Instructors	Vocational Instructors	Technical Instructors	Vocational Instructors	Technical Instructors
Office Occupations	32	26	13	6	26	14
Marketing/Sales	3	5	4	2	2	2
Agriculture	8	5	1	1	2	2
Animal Sciences	1	*	2	1	*	*
Mechanics	13	8	9	6	7	4
Media	1	3	2	1	1	2
Engineering	3	12	6	21	3	18
Graphic Arts	3	6	2	2	*	*
Computers	1	4	4	10	4	18
Allied Health	3	3	8	15	5	10
Electronics	1	2	2	4	1	3
Social Services	7	6	2	*	1	*
Personal Services	6	5	2	1	2	*
Building Trades	6	5	14	5	19	6
Hotel/Restaurant Management	2	*	2	1	3	*
Industrial Trades	4	7	20	19	17	15
Textiles	5	4	7	4	9	4

* Less than 1%

These results are most interesting when compared with the results to similar questions asked of representatives of business and industry (Chapter 5) who agreed with the educators that "office occupations" is the area in which it is currently easiest to find personnel. Similarly they saw "industrial trades" as the area in which it is currently most difficult to find personnel. Business and industry respondents also felt that "industrial trades" would have the greatest future demand for graduates.

Interestingly, respondents from business and industry did not share the view of educators that there would be a strong demand in the future for "engineering" and "computer" trained graduates.

Perceived Strengths and Weaknesses

Each of the groups in this survey, i.e., students, educators, business and industry, and the general public, was asked what it perceived to be the major strength and major weakness of vocational and technical education in South Carolina. Educators felt that "responsiveness to business and industry" was their primary strength (Table 7.20). A total of 31% of vocational educators and 39% of technical educators expressed this view. A "varied curriculum," "accessibility," and "good teaching" also received relatively high ratings.

Both vocatonal (17%) and technical (30%) educators felt that "insufficient funding" was their greatest weakness. This was followed by "poor image" (16%) and "poor counseling" (13%) according to vocational educators, and "poor course offerings" (17%) according to technical educators.

TABLE 7.20

Instructors Indicate the Major Strengths of Vocational and Technical Education in South Carolina

Area of Possible Strength	Percentage of Instructors, by Type, Selecting Each Area as the Major Strength	
	Vocational Instructors	Technical Instructors
Good Teaching	16	11
Low Cost	3	6
Accessibility	14	19
Varied Curriculum	15	10
Responsive to Business and Industry	31	39
Good Facilities	12	7
Job Placement	2	1
Other	7	6

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TABLE 7.21

Instructors Indicate the Major Weaknesses of Vocational and Technical Education in South Carolina

Area of Possible Weakness	Percentage of Instructors, by Type, Selecting Each Area as the Major Strength	
	Vocational Instructors	Technical Instructors
Poor Teaching	8	10
Poor Job Preparation	4	3
Not Responsive to Business and Industry	3	3
Poor course offerings	10	17
Poor Image	16	9
Lack of Facilities	6	5
Poor Counseling	13	4
Lack of Varied Courses	1	2
Insufficient Funding	17	30
Not a Four-Year Program	1	1
Poor Articulation	7	7
Unfair Advantage	*	*
Other	13	9

* Less than 1%

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INTRODUCTION

In order to analyze discrepancies between existing and desired conditions of vocational and technical education in South Carolina, it is necessary to examine all of the data that have been assembled. The synthesis process used here is basically one of induction: the bringing together of many specific statements into a few general statements.

Synthesis allows the best use of the large amount of both objective and subjective data that have been collected for the needs assessment, by juxtaposing similar specific instances of each to support a more general conclusion. The objective data provide a framework upon which the more subjective data can be added to make a more reliable and useable assessment.

By considering objective and subjective data in the same context, it is possible to note the major discrepancies among the data and to reach some general conclusions concerning each area. Each set of conclusions can then be analyzed in turn, each analysis contributing to an understanding of both desired conditions and existing conditions which are the two elements of the formula for discrepancy analysis:

(WHAT SHOULD BE) – (WHAT IS) = (EDUCATIONAL NEEDS).

The synthesis of the data thus provides recommendations for measuring the gap between existing and desired conditions, so that further exploration of particular problems in vocational and technical education can be conducted. A list of resulting needs concludes this section. It is expected that this analysis and the assembled needs will formulate the basis for long-range planning in vocational and technical education.

(WHAT SHOULD BE) – (WHAT IS) = (EDUCATIONAL NEEDS).

NATIONAL TRENDS

Vocational education has, since World War II, moved from the backwash of public education to be an issue of major consideration. Both the public and the federal government have come to realize the increased impact that vocational education can have in preparing students for an increasing technical job market. A college education is losing its charm for a number of students; and vocational education is the alternative which they are choosing.

Respondents to the Gallup Poll of the Public's Attitude toward the Public Schools (1972) indicated that the most important reason for their children to get an education was to enable them to get better jobs; the third most important reason was to make more money and achieve financial success. The same group listed "teaching students vocational skills" as the third in a series of nine items to which they would like junior and senior high schools (7-12) to give more attention. A year earlier (1971), 68% of the respondents indicated that too much emphasis was placed in high schools on preparing students for college and that not enough emphasis was placed on preparing them for employment not requiring a degree. In the 1974 poll, 43% of the students surveyed (high school juniors and seniors) indicated that the overall goal of their school was to prepare students for college; only 25% felt that the major goal of their school was to prepare students for jobs. In a later poll, (1976) 87% of the respondents indicated that one requirement for high school graduation of students not planning to go on to college should be "a saleable skill, such as typing, auto mechanics, nurse's aide, business machines." The same group indicated (80%) that high schools should give more emphasis to careers and career preparation.

These statistics indicate that the United States public generally supports the concept of occupational training within the public school system. In the 1976 poll 90% of the respondents indicated that they were supportive of public education to the extent of serving on citizen advisory committees on education; ranking third on a list of 20 committees on which they would serve career education. Although this kind of participation was acceptable to the public, they nevertheless felt that the final authority regarding the curriculum, staff selection, and budget should be the school board and not citizen advisory committees. This is an importent indication to vocational educators of the public's interest in and support of vocational education.

However, the major impetus for emphasis upon vocational and technical education, perhaps, comes from the exponential boom in technology and the increasing demand for skilled technicians. The responsibility for meeting the demand for technicians and to maintain the relevancy of acquired skills in the face of major technological changes has become the responsibility of vocational and technical education. Changing technology will create new jobs for which people must be trained and eliminate some existing jobs such that those involved will face retraining. As such, vocational and technical education will be involved not only with the "traditional" student, but also, the "reentry" student who has a need to upgrade skills or receive retraining as part of a continuing education process. Clearly, a need for vocational and technical education has been established nationally. In response to the need for quality vocational and technical training, the federal government enacted legislation to support vocational and technical education and to assure that the demand could be met.

The Education Amendment of 1976, Public Law 94-482.

The greatest single factor affecting vocational education in the United States is Public Law 94-482, the Education Amendments of 1976. With this legislation, Congress reaffirmed its belief in the need for the federal government to provide the impetus for vocational education and to assume a large role in its development and administration on a national basis. The Act reiterated the federal commitment to the provision of a vocational education system accessible to virtually all Americans, which provides high quality training and retraining based on actual employment opportunities and geared to the individual's needs, abilities, and interests. It placed particular emphasis on the special needs of particular groups, such as handicapped, disadvantaged and female students, and, on the requirements to provide appropriate training for these groups.

The Act also stressed planning and accountability, requiring the participating states to provide five-year plans, to be updated annually, and annual accountability reports. Each state is required to describe in detail its plans for program improvement, including guidance, counseling and job placement, research, exemplary and innovative activities, curriculum development, and the reduction and elimination of sex bias and sex-role stereotyping. Advisory committees at the local, state, and national levels are provided for and required by the Act, as well as, state and national occupational information coordinating committees, which are designed to increase cooperation among manpower agencies through the pooling and sharing of occupational information.

To implement its various provisions Public Law 94-482 authorized the annual appropriation of more than $1 billion initially, to be increased over the five year period through fiscal year 1982 to almost $2 billion. Of the $577.5 million actually appropriated for fiscal year 1978, the South Carolina Department of Education received $9.5 million to implement and administer South Carolina's vocational education program; $821 thousand of this amount subsequently went to the State Board for Technical and Comprehensive Education for the state's postsecondary (technical) program.

Legislation of any kind always results in more controls, and this is especially true of vocational education. Subject to the provisions and requirements of legislation designed to redress the past inequitable treatment of certain groups (i.e. handicapped, disadvantaged, women) vocational education is stringently controlled by the Education Amendments of 1976, with its stress on planning, accountability, sex equity and handicapped and disadvantaged students. Vocational educators are also concerned with its funding level, which seems small in comparison with that of the CETA program, and wonder if vocational-technical education may not someday be absorbed into a vast, national manpower system. And in South Carolina, they are concerned with the distribution of state and local funds, as re-established by the Education Finance Act of 1977, which could very well result in insufficient funding of vocational programs in some local districts. The point of the law, Public Law 94-482, is to assure that the information necessary to conduct effective planning toward implementation of vocational programs, which will remain a service to the local, regional and national community, is provided.

STATE TRENDS

In 1970, the median school years completed by South Carolinians 25 years and older was 10.5, compared to a national figure of 12.1. The percentage of South Carolinians over 25 who had completed 8 years of school or less was greater than that for the United States overall, and the percentage of those who had completed 9 or more years was correspondingly less than the national figure. In 1976, the per capita personal income of South Carolina was $1,252, (20%) less than that of the United States; the South Carolina median family income was $1,966, (21%) less than the national average. In South Carolina during 1976, manufacturing accounted for 26.3% of labor and proprietors income, over 6% more than the corresponding sector of the national income. The South Carolina urban-rural percentages for 1970 were 48/52, compared to the United States percentages of 74/26.

These and other data have been cited again and again, to support the view of South Carolina as a typical underdeveloped region whose citizens are rural, uneducated, and poor and whose major source of industrial employment is in low-skill, labor-heavy, non durable goods manufacturing. But now there are other data which, if not contradictory to this view of the state, at least indicate that change is at hand. Between 1970 and 1975 the number of housing units in the state increased by 59%, as compared to a national increase of 4.2%. Personal income increased in South Carolina by 12.0% between 1975 and 1976, compared to a United States increase of 10.2%. Spending for non-residential construction increased during this same period by 42.8%, compared to a national **decrease** of 51% and projections of economic growth during 1975-1985 indicate that the contract construction and services sectors of the state's economy will outpace manufacturing by 32.7% and 42.2%, respectively.

Trends such as these have been noted often during the past few years as occuring throughout the South and Southwest - the "Sunbelt." As the Northeast has declined in recent years, the Sunbelt has become economically stronger and has experienced a population growth due mainly to immigration from other regions. More and more business and industries have opened offices and plants in the Sunbelt, some of these representing expansions and others, complete relocation in the region. Attracted by better weather; more favorable taxes, a labor force willing to work, and a healthier labor-management climate, well-diversified industries have come and brought with them a need for well-trained, skilled workers.

In order to compete with southwestern and other southeastern states for its share of the improving economic picture, South Carolina, since the early 1960's, has had to overhaul its vocational education system. Prior to that time, vocational education in South Carolina - as well as in most of the United States - was largely viewed as a program for students who were not "college material" either because of disinterest, lack of ability, or lack of funds. The success of a high school depended entirely on how many of its students went on to college and how well they did there. College attendance was stressed by the federal government and this emphasis was mirrored by almost every sector of government and society. Vocational education was considered second-rate and was relegated to the school basement or some outbuilding, where home economics, agriculture, and a few other courses such as "manual arts" or "wood shop" were taught.

An indication of the federal government's own attitude toward vocational education was the level of funding it provided, which remained at $7 million annually, from the passage of the Smith-Hughes Act in 1917 until the passage of the George-Barden Act in 1946, which increased the annual appropriation to $29 million. But 1963 was the year in which real changes began to occur, marked by the passage of the Vocational Education Act of 1963 (Public Law 88-210).

The Vocational Education Act of 1963 extended vocational education into the postsecondary (non-baccalaureate degree) areas of highly skilled technical training and made it specifically available to the handicapped and disadvantaged. It authorized program improvement services and adult vocational programs. But perhaps most significantly, it provided matching funds for the construction of vocational education facilities and increased the annual appropriation from an initial $60 million to $225 million over a five-year period. The Vocational Education Amendments of 1968 (Public Law 90-576) further increased the annual appropriation to twice its previous level.

Almost simultaneous with the increased attention from the federal government was the sober look that South Carolina took in 1961 at the state's need for occupational training. Realizing that South Carolina was currently in no position to attract new investment capital and the resulting employment opportunities, the legislature authorized the creation of the State Committee for Technical Training (1961 Act No. 323). This legislation not only provided the basis for the development of the state's technical education system including the special schools (industrial services) programs - but it also recognized the state's need for more and better occupational training at the secondary level.

In the improved atmosphere after the 1961-1963 period, South Carolina's vocational-technical education systems flourished. The state's secondary system of area vocational centers and wings now total 56 separate centers and 21 wings, constructed since 1965 at a cost of over $61 million dollars. The centers and wings

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represent more than 3¼ million square feet, with 947 laboratories and 432 conference/classrooms. Secondary vocational programs are also taught in 216 high schools located throughout the state.

The postsecondary technical education system comprises 16 technical education institutions on 18 campuses, totaling over 2 million net square feet. These facilities have been constructed, with a few exceptions, since 1961, and represent an investment of over $51 million.

For all practical purposes, the construction of facilities for the South Carolina vocational-technical education system is complete. Although the future construction of two additional area vocational centers and two high school wings has been proposed, most of the construction projected over the next few years will be for expansion and renovation of existing facilities. The technical education system similarly projects mainly expansion and renovation of existing facilities, although the construction of several new buildings is planned to replace outdated facilities on some of the campuses.

It is obvious that vocational-technical education has played a significant role in the development of the state and its citizens. However, the system of vocational-technical education established within the State of South Carolina to foster economic development must keep pace with the needs of the industry and citizens of the state if it is to maintain a vital role. The challenge for vocational-technical education is to keep pace with the technical changes emerging within the state. The objective of this needs assessment and especially this synthesis is to establish the needs of the system. These will be defined through the following analysis of the data available.

DATA SUMMARY

Public Attitude

Generally, the data available to the Office of Vocational Education reflects the national support for vocational-technical education indicated in the Gallup Polls. Ninety-seven percent (97%) of the public surveyed by NES statewide felt that vocational education was useful and valuable. The attention which this state has given to the development of an effective system of vocational and technical education justifies this support. The result of the state's emphasis on vocational-technical education as a major thrust of its economic development effort can be seen in the growth of the state. Overall, the vocational and technical education systems in South Carolina are doing a good job of preparing students for employment and/or further education.

However, the NES Survey further indicated that while the public support the concept and need for vocational education, the vast majority (60%) were not actually familiar with vocational education programs. Most of the public who were fairly familiar or very familiar with the programs indicated that they had learned about them through their own enrollment in a program (25.2%) or through the enrollment of a family member (22.3%). Other ways they indicated that they had learned about the programs included: newspapers (16.1%); vocational-technical publications (11.2%); friends (7.8%); living near a center (5.1%); and school representatives (4.7%).

While business and industry representatives were more familiar with vocational education programs (88% stated that they were fairly familiar with the system.) from this same group, 11% felt that the image of vocational education needed improvement over and above other concerns. Further analysis of the response of business and industry indicates that 71% of those polled seldom seek out vocational education programs as a source of employees despite the fact that 73% could use vocational education graduates; 99% would utilize graduates if they had the skills required and 61% had, in fact, hired vocational education graduates. Those who do not seek out graduates of vocational programs in the face of such positive data must be holding on to some vestage of a poor image which vocational education had in the past. This conclusion concurs with the response of educators, 16% of which felt the image of vocational education needed improvement, and of the public, 24% of which felt that better publicity would improve vocational education.

NES suggested that a concentrated effort be made to make all South Carolinians aware of vocational-technical programs, by increased publicity in newspapers, magazines, television, and radio. This effort should stress vocational and technical education's potential for adult retraining and skill upgrading, as well as the training and educational opportunities available to children and younger adults.

Publicity and the public attitude which it affects can have far reaching impact on the success of vocational education and its graduates. The better the attitudes of business and industry toward and awareness of vocational education, the easier it will be for graduates to find and secure better jobs. Survey results indicate for example that of those companies which had not hired vocational education graduates, 45% stated the reason as none had applied. The question of business's involvement in vocational education affects the quality of vocational programs.

Advisory Committees

The State Advisory Council on Vocational and Technical Education appears to be discharging its functions as mandated by Public Law 94-482 and other federal and state legislation, and providing the vocational and technical education systems with valuable information and advice. Within the technical education system, the area commissions provided by state law (Act 654, 1976) to govern the local TEC's also satisfy the requirement of Public Law 94-482 for local (institutional) advisory committees.

The technical education system has also, as a matter of policy, required the provision by the local TEC's of craft committees for the various programs of study. There is some evidence, however, that the level of activity and effectiveness of these craft committees vary considerably from TEC to TEC and, within a TEC, from program to program. Some of them are virtually inactive and are known as "paper Committees."

This situation also exists to a degree among the secondary level advisory committees, formed in large part after 1977, in response to the requirements of Public Law 94-482. Because the Act allowed local districts the option of having either program area, school, community, or even regional committees, various types of advisory committees were set up and reported to the Office of Vocational Education in the local plans.

All of the 92 local districts have complied with Public Law 94-482 in that they have formed some kind of local advisory committee. The technical education institutes have local advisory committees in the form of both area commissions and craft committees. The intent of Public Law 94-482 in requiring local agencies to establish advisory committees is clearly stated in Section 105 (g) (1): "Each eligible recipient receiving assistance under this act to operate vocational education programs shall establish a local advisory council to provide such agency with advice on current job needs and on the relevancy of courses being offered by such agency in meeting such needs." The local advisory committees, then, have the extremely important responsibility of providing information which is the basis upon which new programs are begun and existing programs are continued. The only other method in which state-level funding agencies are able to monitor the continued relevancy of an existing program is the indirect one of relying on job placement data, which, as discussed later in the text, may lack completeness and accuracy.

As indicated above, the advisory committees serve as the main check for ensuring program relevancy. Unfortunately, there is no hard data available to measure the performance of the advisory committees at the local and state levels. Due to the importance of this function, a real need exists to determine the effectiveness of these committees: 1) How many of these committees are active? 2) What is the quality of their output (recommendations)? 3) Are their recommendations used to improve program quality? 4) Are advisory committees functioning as they should? The extent of the problem is unknown.

The NES data does provide some information on this topic. Sixty-eight percent (68%) of business and industry representatives stated that they were seldom or never solicitated for vocational information. Sixty-one (61%) said that they seldom or never visit local vocational centers. Twenty-five (25%) of educators surveyed felt that the contribution from advisory committees was slight. Twenty-nine percent (29%) felt that program development tended not to meet the needs of business and industry. Only 58% of local educators clearly indicated that program review involved business and industry representation; 33% did not know.

While the data is not conclusive, it does indicate a lack of effective functioning within the scope of responsibility of the advisory councils. The need exists to define those committees which have been effective as well as those which are weak and to initiate programs to increase the effectiveness of advisory committees.

Program Relevance

Program relevance should be related to the extent of business involvement and the quality of employment and follow-up data available. While the discussion on the effectiveness of advisory committees indicated gaps in business involvement, the data concerning program relevance tends to be ambiguous.

For example, the NES survey indicated that of the approximately 31% of the public sample who were trained through vocational education programs for the position which they held, 68% felt they were well prepared. Thirty-two percent (32%) of the public sample, on the other hand, felt that there was a need for more thorough training. Fifteen percent (15%) thought that more popular courses should be offered. Twenty-seven percent (27%) of the business and industry survey group agreed that poor job preparation of vocational students was a problem. Thirteen percent (13%) of the business and industry group, also, felt that course offerings was an area in need of improvement. Educators also, listed this as a concern (10%) as did high school vocational students (8%) and adult education students (18%).

Weakness in the planning process indicated in the analysis of the function of the advisory committee are further supported by the response of educators. Twenty-nine percent (29%) felt that little development of new or innovative programs exists. Twenty percent (20%) indicated that review of programs occurs less frequently than on an annual basis.

Yet, despite this weakness in planning, 88% of the students sampled felt they were adequately prepared by the training. Businesses rated vocational education employees as average or better than average on the job. And, responsiveness to business was indicated as a major strength of vocational education by 29% of the students, 31% of the educators and 33% of the business samples.

The compilation of the data bearing on program relevance tends to support the conclusion that, overall, vocational education has been responsive to the needs of the business/industry and students. However, there exists the need to define relevance specifically by program or course offering. It is expected that such an analysis would find some programs which are effective and some which need updating or further development. The overall planning process needs to be evaluated to access the degree to which business/industry is involved in the process and the degree to which established procedures are followed and their effectiveness or need for improvement.

Currently placement follow-up data are solicited from teachers on the status of occupational program completers and leavers with marketable skills. Occupational teachers are asked to classify these students into the following categories:

A - Status Unknown
B - Unavailable for Placement due to:
    1. Continuing education
    2. Armed forces
    3. Homemaker
    4. Other (e.g., death)
C - Available for Placement and:
    1. Employed in field trained
    2. Employed out of field trained
    3. Unemployed

This system is less than adequate for a number of reasons. The distinction between whether a student is placed in or out-of-field is unclear. Is a student who is trained as an auto mechanic and takes a job selling auto parts, classified as placed in field or out? What about a student trained as a carpenter who takes a job as a maintenance man at a paper mill? Also when a student is unquestionably placed in field, did that student take a job with availability and pay commensurate with his vocational training? Completers in a food service program who take the same jobs at fast-food restaurants as high school dropouts with no vocational training are certainly placed in field, but to what advantage? Another question involves those reported as "continuing education." How many of those students would actually have preferred to go to work, but were not able to find jobs? A final criticism of the system is that it is impossible to verify reports. The Office of Vocational Education at the state level has a policy statement which sets an acceptable level of placement as 50% (of those available for placement). This may encourage teachers to distort their reports in order to reach the minimum level. Also, this 50% policy is regarded by some as too low.

Obviously, the best type of placement information would be that from the employers of occupational completers and leavers. Information obtained on how well these students perform on the job would be invaluable in improving existing occupational programs. The proposed national Vocational Education Data System (VEDS) established by P.L. 94-482 does include an employer based placement follow-up component. This would create a much needed feedback mechanism from employers which would permit local school districts to maintain a high degree of program relevancy. Placement reporting will be improved considerably by the VEDS computer-based follow up.

In order to allocate and administer federal and state funds most effectively toward the goal of training students to fill jobs that exist, state-level administrators need the best possible information on job availability and program relevancy in each local area of the state. Without such reliable information and without effective advisory committee input there is the possibility that the continued need is assumed to exist when it actually does not.

Considering the high costs of facilities, equipment, and instruction, the time and effort expended by students in training and the rapid, often radical, changes which have become commonplace among areas of modern technology, it would seem reasonable for state vocational and technical administrators to require more of local administrators in the way of reporting local job demand and program relevancy than they presently do. More detailed information on their advisory committees general and specific duties, responsibilities, and activities should also be a basic part of local plans and requests for program funding. On the other hand, the Office of Vocational Education, the TEC Central Office, and the State Advisory Council on Vocational and Technical Education could be of invaluable service to local districts and TEC's by providing them with the guidelines, instruments, data processing assistance, and training necessary to conduct assessments of local job demands. Such efforts would do much to help state and local administrators satisfy both the letter and the spirit of Public Law 94-482, by basing program establishment, continuation and update on solid reliable, and current job demand data.

Program Effectiveness

While the predominant response of students (85% prepared for the jobs they want), business (90% felt vocational students average or above a average on the job), and post-secondary educators (81% felt students prepared for technical training) is positive, there is still the puzzling response of business and industry representatives (27%) that poor job preparation is a problem. This concern could generate from a lack of coordination of vocational and technical education with business and industry.

Areas designated as needing improvement by students included teaching (15%) and facilities (13%). Educators felt that weaknesses hampering effectiveness were largely the result of inadequate funding (17%). As far as vocational skill training is concerned, the strength of the programs outweigh the concerns. However, evidence supporting a need for further evaluation is available.

The area of basic skills, however, is a definite concern. While students feel they are well prepared (93%), educators (92%) felt that students were somewhat poorly prepared. On a separate survey in which all junior high school students participate, (ACT Career Planning Program), improvement of basic skills is a concern of the student about to enter their final year.

Facilities and Equipment

The development of the state's vocational education system is close to completion of basic construction. However, the need will continue to exist for renovation and facility update. Equipment, especially, will have to be assessed to assure that it offers students and teachers the most relevant training available in consideration of technical changes and innovations.

Students surveyed in the NES analysis of perceptions indicated an overall favorable reaction to the facilities and equipment available to them. However, a number of students (20%) felt that facilities were inadequate and fifteen percent (15%) indicated that equipment is out-of-date. Twelve percent (12%) of educators surveyed, also, felt that facilities served the needs of faculty and students to a small extent. Eleven percent (11%) rated equipment as outdated. If inadequacies do exist, the question remains to identify those deficits.

During the basic construction phase of the secondary system of area vocational centers and vocational wings, state-level review of requests for new facilities and expansions was a comparatively easier process than it presently is. Once an area demonstrated local need, based on local job demand, potential enrollments, and local interest and support, the decision to approve the request rested primarily on the amount of funds available. Construction funds for a particular year were allocated in priority order according to need, until they were expended, and then the process began for the next year. But now, with new construction virtually complete, requests for renovations and expansions should be reviewed with more sophisticated information at hand. Although the postsecondary system currently has a mechanism in use for determining a facility usage rate, no such mechanism exists in the secondary system. In order to plan more effectively and to allocate funds more prudently, the Office of Vocational Education should have a system by which measurements such as room utilization, station occupancy, total state capacity by program, and facility quality can be made and a current inventory of facilities by laboratories/classrooms by program can be maintained. This would require a fairly complex system of inventory and usage reporting, and, prior to any plans for its development, a thorough analysis of benefits to cost should be done.

Local vocational educators have been critical of the mechanism currently used by the Office of Vocational Education to ensure that schools have adequate and high-quality equipment for the programs offered. Initial equipping of a new program is done on the basis of a state-approved list for that program. Teachers and administrators have complained that, for some programs, the lists omit some necessary equipment and contain other items which are out-of-date or inappropriate. The state inventory system has also been subject to criticism.

The postsecondary system assigns each item of equipment an inventory number and stores it in a computer file, along with such information as date of purchase and expected useful life span. As equipment is regularly inventoried and evaluated, information concerning the condition of each item can be added to the file and updated periodically. It is therefore possible at any given time to determine equipment needs for the entire system, for an institution, or for a program based on this computerized information.

Accessibility

General Availability

The average number of secondary vocational courses offered per South Carolina county is 45.2, including Consumer and Homemaking, Industrial Arts, and Prevocational Education courses, and counting all levels of individual course titles, (e.g., Forestry I, Forestry II, etc.) Trade and Industrial Education offers the largest selection of courses (19.0 per county) and Health Occupations the smallest (.89 per county). Counties having the largest selections of courses available are Charleston (77), Greenville, and Spartanburg (74 each). Those having small numbers of courses available include Jasper (14), McCormick (19), Bamberg (22), and Calhoun (23) although these figures do not account for courses available to these students in vocational facilities located in adjacent counties.

Although the selection of secondary courses available statewide seems generally adequate, it is evident that students in larger counties have a wider variety of courses to select from than students in the smaller (less populous) counties do. This is understandable, considering the relative number and types of jobs available in larger and smaller counties and also considering the differences in funding ability among counties. However, the NES Student Survey revealed that 12.0% of the High school/vocational students surveyed indicated that they were not in the program of their choice.

Fifteen percent (15%) of the public survey which had not attended stated that lack of accessibility or openings was the reason for not attending. And, 8% of the educators felt that courses were not easily accessible. The survey did not reveal the reason why this was the case, but NES offered several possible explanations: enrollment limitations, program prerequisites, and inadequate offerings. The recommendation was made that a determination of the reason(s) for this situation be made.

Access To Handicapped Students

Fifteen percent (15%) of vocational education students are handicapped in some manner. For these students, access to vocational programs can be a special problem. For 30% of the handicapped students these problems require special, self-contained programs. For the majority which are mainstreamed in the general student population, however, access to these opportunities are a matter of how well the school system has eliminated barriers to the student.

Secondary and post-secondary vocational facilities like most public buildings are under certain legal requirements, both federal and state, to be accessible to the physically handicapped. In new and fairly recent construction, this has not been a problem because building plans are now routinely checked to assure that these requirements are met. But in older buildings, there may not be adequate provisions for the physically handicapped. This may be a problem for some students.

In the NES public survey, 15% of those questioned responded that they were handicapped. Of this group 31% stated that barriers had prevented attending vocational programs; 24% felt that their handicap had prevented acceptance into a program. This information documents a history of access problems for handicapped students. However, the degree of the present problem is not indicated. Of the small group of handicapped students surveyed by NES, 25% indicated that their handicap has been a problem. The nature of the problem is not clear. The possibilities are numerous. For example, the problem may be an expression of the student's attitude about himself or the attitude of classmates, teachers, etc., rather than facilities or program deficits.

The NES Final Report concluded that a problem may exist in this area, but recommended that, because the number of respondents indicating that they were handicapped was so small, an in-depth study of the nature and extent of the problem be made prior to any further action. Such a study is currently in process in the post secondary system. Each TEC has been requested by the Central Office to produce a "Transition Plan," which will indicate the extent and estimated cost of the changes required to bring its facilities into compliance with Section 504 of the Rehabilitation Act of 1973 (Public Law 93-112, as amended). This law requires the accessibility of the handicapped to institutional employment and programs, as well as their physical accessibility to facilities.

Plans for new secondary vocational facilities are jointly checked by the Office of Vocational Education and the Office of School Planning and Building to assure that they include provisions for the handicapped. Older buildings are modified to remove physical barriers as the need arises; this is generally considered a local matter, although the Office of Vocational Education and the Office of School Planning and Building are available on request to review problem areas and to make recommendations for modifications. There are presently no plans to survey secondary vocational facilities on a statewide basis to determine the extent of physical barriers to the handicapped.

To sum up, there are four basic problems confronting vocational educators in their attempt to provide instruction to special students:

1. The probable existence of physical barriers to handicapped students preventing their (at least, easy) access to vocational facilities.
2. The probability that few, if any, special placement services are provided to handicapped students. (In view of the deficiencies cited in vocational guidance and placement in general, this is not surprising.)
3. The lack of information - or of any method for obtaining information - concerning how many special students want vocational training, as opposed to how many are actually enrolled, makes it impossible to determine how well the needs of special students are being met by the system.
4. The costs of mainstreaming special secondary vocational students (no longer fully covered by federal vocational funds) and of providing remedial instruction to one-fourth of all impossible for local school districts and TEC's to provide these special services in adequate measure.

If these problems are not faced and solved, vocational and technical education in South Carolina will have missed an excellent opportunity to perform invaluable services both to society as a whole and to the individual handicapped or disadvantaged vocational student - by providing the special student with the special training necessary to become a productive and dignified citizen, capable of self-support and worthy of the respect of all.

Sex Bias and Sex Stereotyping

There was little if any indication from the groups participating in the NES survey that problems from sex bias and sex role stereotyping exist to a significant degree within the vocational and technical education systems in South Carolina. This was true of students, faculty, administrators and those members of the general public who had had experience with vocational/technical programs. Only 3% of the students in the NES survey felt that there was discrimination against either men or women in programs. Only 8% of the educators felt that recruitment was not equal and 14% of the educators further expressed the opinion that programs were not easily accessible to both sexes.

However, a look at the objective data on the system indicates some areas of concern. While female enrollment in vocational education accounts for half the total, three of every four females are enrolled in either consumer and homemaking courses or office occupations courses. Consequently these females are being trained primarily for lower paying jobs or as homemakers. This is particularly significant in light of the substantial increase in women seeking work during the last five years. This pattern of sex stereotyped program selection is perpetuated in high school when, males choose prevocational and industrial arts exploratory programs as opposed to females who elect consumer and homemaking exploratory programs.

Another factor which must be considered if women are going to be encouraged to enroll in non-traditional programs is the placement record of females in these programs. The NES survey of business and industry indicated that 63% of the companies questioned felt that traditional hiring practices currently prevails. This information states a fact about the world of work but does not indicate why this exists. It could be a result of the number of women available as easy as it may be caused by the attitude of business and industry. However, it is important to know specifically what the attitude of business is in order to assess the outlook for non-traditional students.

The pattern of sex stereotyped program selection is further reinforced by vocational teacher composition. The composition of vocational teachers is similar to student enrollment. While females account for 48% of the total number of teachers, 74% of the females teach either consumer and homemaking courses or office occupation courses.

A separate but related problem is that involving upper level vocational/technical educational administration. Females comprise a distinct minority of upper level administrative positions at the state and local levels in all three systems within the state. This problem is not unique to the vocational/technical system but common to state and local government as a whole.

In summary, conditions for significant problems within the system do exist at every level although public awareness of sex bias and stereotyping is virtually non-existent. As inflation takes its toll in the coming years, there will be increased economic motivation for the women in South Carolina to cry foul and demand a more equitable piece of the pie.

Guidance and Job Placement

Guidance

In the NES telephone interview of the general public, 44% of the respondents who had been in some vocational or technical education program indicated that no guidance services were available in the institutions they attended. Because there is no way of determining what kind of programs these respondents attended (adult vocational, TEC continuing education, etc.), it is not known whether guidance services were actually not provided or whether the services were simply inaccessible to these respondents for some reason or other (lack of information, scheduling conflicts, etc.) But, for whatever reason, almost one-half of the general public interviewed who had had experience with vocational or technical education programs, did not have the benefit of guidance during this experience, which indicates that a problem exists somewhere in the system. When asked if any guidance services were provided when they exited the program, almost three-fourths of the respondents (74%) indicated that no services were provided.

While 95% of the students in the NES Student Survey indicated that their school had guidance services, only 66% said that they had used these services. By major groups of students, the high school vocational students most often used the guidance services (84%) followed by technical students (55%), and adult vocational students (23%). The low rate of usage among adult vocational students is especially interesting and warrants further investigation of the appropriateness, if available in the first place, of guidance services to adult students. Questions which should be addressed are: 1) what is available, 2) what is the quality of available services, and 3) what are the needs of adult students for guidance services. These same questions should be addressed concerning guidance services in general. Guidance can be a passive service as it tends to be in the present system of education or it can provide a more active and vital input into the development of students. The emphasis of federal initiative in career education is to provide such a thrust to guidance services in relation to educational programs.

The State Department of Education's Defined Minimum Program for South Carolina School Districts' requires vocational centers to provide counseling to vocational students at a ratio of one full-time counselor per 500 or more students. This results in the funding of one full-time counselor at each vocational center in the state, since the average center enrollment for 1977-78 was 591 students. Given the fact that each student is in the center for three hours or less per day, it is obvious that there is little opportunity for one-to-one contact between student and counselor at the vocational center. And, unlike the regular high school, the vocational center focuses solely on instruction during the student's time there, and does not provide times such as homeroom or free periods, during which the student can be counseled. Counseling at the vocational center occurs before or after the instructional period, which makes it difficult to arrange meetings with students because of bus schedules to and from the feeder school, or during the period, which interrupts the student's instruction.

Possibly a more fundamental problem with usage of vocational counselors within the vocational centers - at least from a vocational counseling point of view - is the obvious fact that the students attending vocational centers have already chosen a vocational program and, to that extent, a career. This situation must surely undermine the effectiveness of vocational counseling, by making it largely superfluous. The possibility of using vocational counseling as a focal point from which to attack sex bias and sex-role stereotyping is also lost by this time because the students have already chosen and enrolled in a vocational program.

Complicating an already bad situation is the evidence that, in many vocational centers, guidance counselors are given other duties, such as assisting the vocational center director in the general administration of the school and job placement activities. These additional demands on the counselor's time, coupled with a general reluctance on the part of counselors to visit feeder high schools and junior high schools, further detracts from the effectiveness of counselors in assisting students before they choose a vocational program.

Many suggestions have been offered to help alleviate some of the shortcomings of the state's secondary vocational guidance program. One suggestion is for the development of a statewide career information system, which would assist counselors by making statewide, comprehensive, career information easily available to students, saving counselors the time and effort now spent in gathering, updating, and disseminating statewide and local information. Provisions for such a system of career information are incorporated in the plans for the state occupational information system (SOICC), discussed earlier in this document.

The addition of more exploratory programs throughout the state - especially prevocational education programs - would provide vocational information to more junior high school students during the period when they are undecided about enrolling in a particular vocational program or about enrolling in a vocational program at all. Present prevocational programs were rated as ineffective by 36% of the students in the NES survey. Better prevocational education would enhance the counselor's effectiveness as a recruiter and as a vocational counselor.

There is little evidence that specialized vocational guidance services (e.g., for handicapped and disadvantaged students and for female students planning to enter non-traditional jobs) are currently being provided in South Carolina. As federal laws such as Public Law 94-482 and the Education for All Handicapped Children Act continue to emphasize and require such services for special groups, it becomes incumbent on vocational education planners to make the provision of these services a regular part of the secondary guidance system.

Because of the inherent problems associated with the location of vocational guidance counselors in the vocational centers, there has been some movement to locate all guidance counselors in the parent high schools, and to provide specific training to individual counselors. This would enable the guidance staff to offer specialized guidance and counseling services to different groups, such as college-bound or vocational students, or in specific areas, such as testing.

Job Placement

As discussed earlier, one of the most controversial issues in education today is accountability. Regardless of the failure of educators in general to agree on a single definition of the term and who is ultimately accountable, vocational educators agree that the placement of vocational program completers in jobs relevant to the training they have received is central to the idea of vocational education accountability. Job placement results (including follow-up information on graduate performance) must be the final word concerning a vocational program's relevance, and its success in imparting skills and knowledge to students.

Although it states the qualifications required by a job placement coordinator, if one is employed, the State Department of Education's "Defined Minimum Program" (DMA) places no requirement on area vocational centers to employ any job placement personnel. As for the funding of job placement services, Public Law 94-482 allows federal funds to be spent for this purpose although there is no requirement for the states to do so. The practice of the Office of Vocational Education has been to require the use of state and/or local funds when a vocational center employs a separate person to perform only placement and follow-up duties, and not to allow the use of any federal funds for this purpose, as stipulated by federal guidelines.

Both, the lack of any DMP requirement for vocational centers to provide the services of job placement coordinator and the restrictions on the use of certain funds for this purpose probably play a role in the disinclination of most of the vocational centers to provide full-time coordinators. In 1977-78, only 8 full-time and four part-time job placement coordinators were reported as employed by the centers. One center reported that job placement and follow-up activities were the responsibility of a county placement team, leaving a total of 43 of the state's 56 vocational centers with no specific staff member responsible for these duties. It is probable that, in most of these centers, job placement and follow-up are the additional duties of teachers and guidance counselors. If the 1976-77 secondary placement report for vocational program completers is any indication, placement efforts in South Carolina are only mediocre. Out of a total of 9,398 program completers who were available for placement, only 5,371 were reported as placed in field trained - an overall total of only 57%. Because of the inadequacies of the current placement reporting system (cited earlier in this document), the actual percentage of program completers placed in field trained may be higher or lower.

Indications of perceptions of the general inadequacies of current job placement services in South Carolina appeared in all four of the NES surveys:

-35% of the respondents to the public interview who had participated in vocational or technical programs indicated that no job placement services were provided by the schools they attended, and 17% found it difficult to find a job after termination.

-45% of the business-industry respondents who had not hired any vocational or technical graduates within the last two years indicated that they had not hired any because none had applied.

-According to business/industry respondents, only 9% of vocational graduates hired and 12% of technical graduates hired within the last two years had made contact with them through their school placement services.

-Of the respondents to the student survey, 18% of the technical students, 39% of the secondary vocational students, and 50% of the adult vocational students indicated that no job placement services were available at their schools, or that they did not know if such services were available.

-Of these same students, large majorities indicated that they had not sought job placement guidance at their schools, (technical - 86%; secondary vocational - 92%; and adult vocational - 91%).

-54% of all educators surveyed indicated the guidance programs in their schools did not offer job placement services.

-45% of the secondary educators and 36% of the technical educators surveyed indicated that they did not know how many of their graduates obtained jobs in the areas in which they were trained. This exists despite the fact that follow-up information is collected from the educators.

-Fewer than 2% of all educators surveyed cited job placement as the major strength of either vocational education or technical education in South Carolina.

The general emphasis today on educational accountability, and specifically on placement of vocational program graduates on jobs directly related to the training they have received indicates that job placement and follow-up activities are far too important to be considered merely additional duties to be assumed by vocational faculty and other administrators. Providing that the proposed National Vocational Education Data System (VEDS) is implemented as planned in South Carolina, many of the problems and shortcomings of the current follow-up system will be vastly diminished, if not overcome completely, including the notable lack of feedback from employers on program relevancy and graduate performance. Also the full implementation of the state occupational information system (SOICC) will help alleviate the problem of providing accurate, up-to-date information on available jobs and training requirements to vocational counselors and students alike, and in such an accessible and timely manner that will be of benefit to students both in choosing an occupational program and a career, and in finding a job upon completion of their program.

In order to benefit more fully from these much-needed services, vocational education in South Carolina must improve the job placement services currently provided to vocational students. Some of the more serious deficiencies could be corrected by:

1. Requiring vocational centers (or school districts) to provide a minimal level of job placement services to vocational students;
2. Providing additional funds - or easing restrictions on currently available funds - to finance these required job placement services;
3. Establishing a focal point within each county for job placement activities (including the dissemination of job information to students and of student resumes to employers);
4. Coordinating job placement activities to assure that local businesses and industries have only one contract person per county who will both provide information to them and solicit information from them (an especially important consideration in those counties with more than one vocational center);
5. Promoting better coordination, especially at the local level between
   a. local employment services offices (ESC)
   b. technical education (postsecondary) placement services
   c. vocational education (secondary) placement services;
   and
6. Providing specialized placement services for groups with special needs (e.g., handicapped and disadvantaged students and female students planning to enter non-traditional jobs).

Pre-vocational Education

The NES Student Survey revealed that the high school/vocational students surveyed had previously participated in exploratory courses as follows: Industrial Arts (12.4%); Prevocational (49%); and Home Economics (28.6%). Over one-fourth of the students (25.1) had taken none of the exploratory courses. Of all students (nonvocational, vocational, adult, and technical) who had taken an exploratory course, 49.8% indicated that the course had helped them to decide on an occupation. NES recommended that the development of prevocational programs should be continued and expanded to include such topics as career orientation and opportunities; it was also recommended that a determination be made as to why only half the students who had taken an exploratory course indicated that the course helped them in deciding on an occupation.

Although the DMP requires each school district to offer prevocational education, the survey results indicate that fewer than half (49.1%) of the vocational students (high school seniors) had taken the program. From the available data, it cannot be determined whether the prevocational programs offered were actually accessible to all students who wanted them, or whether all the students were aware that the programs were available to them. In either case, it is apparent that merely offering the program is no guarantee that students will take advantage of it to help them in deciding on an occupation.

The question as to the effectiveness of all the exploratory programs in helping students to decide on an occupation should also be investigated. Since the purpose of the programs is to assist in making sound career decisions, then they appear to be only moderately successful.

Another problem that should be addressed is the percentage of males and females enrolled in the programs statewide. Of all the students in prevocational programs accross the state (grades 9-12), only 19.6% are female, females in industrial arts programs account for only 14.1% of the total enrollment. On the other hand, 83.7% of all consumer and homemaking education students are females. The exploratory programs could be a valuable asset to vocational educators in overcoming the traditional barriers to certain programs and occupations for members of one or the other sex. Unfortunately, the participation of females in the prevocational and industrial arts programs reflects their participation in the trade and industrial programs (18%) and the agriculture programs (12%). The situation is also similar to that of the vocational teachers in South Carolina: virtually all consumer and homemaking teachers are female, while females account for 10% of the trade and industrial teachers, 25% of the prevocational teachers, and only 2% of the industrial arts teachers.

If the patters of sex-stereotyping that exist among the various occupations and the sexually-biased attitudes behind these patterns are ever to be changed, vocational educators should concentrate some of their efforts among the exploratory programs. By actively recruiting females into prevocational and industrial arts programs and males into consumer and homemaking programs and by making all possible efforts to balance the distribution of male and female teachers among these programs, vocational education administrators could make the similar tasks of balancing the enrollments among the occupational programs easier. If this is not done, and skilled graduates of both sexes are not available for work, business and industry will always be justified in continuing to hire only members of one sex for certain jobs.

Adult Education

Statewide adult vocational education enrollment in South Carolina during 1976-77 totaled 17,500. For school year 1977-78, a total of three full-time and one part-time adult program coordinators were reported as employed on the staffs of the 56 vocational centers. Given those figures, it is not surprising that 78% of the adult vocational students surveyed by NES indicated that they had not used any school guidance services, and that 91% had not even sought job placement guidance.

As in the case of job placement services, there is no requirement in the DMP for area vocational centers to employ adult vocational coordinators, although it does state the qualifications that an adult coordinator must have, if employed. Other testimony to the lack of state-level direction regarding adult vocational education includes; 1) no one in the Office of Vocational Education is specifically responsible for the program, 2) the year-to-year funding level of the program is uncertain and, 3) there appears to be no standard or consistent methodology for allocating what funds are available each year. Moreover, there seems to be no state or local-level efforts to coordinate the various adult programs operated by the Office of Vocational Education, TEC, and the state system of colleges and universities. In view of the rapid changes in technology that almost all business and industries are faced with today, the adult vocational education programs offered by the vocational centers could be a valuable asset to the state's economy. By providing short-term skill upgrading courses to employed workers who must stay up-to-date in order to retain their jobs, the vocational centers could be providing a great community service. This applies as well to the potential of the centers to help the unemployed and underemployed learn new skills and help themselves, their communities, and the economy of the state. The centers could also become focal points for community interest programs, as well as for the skill upgrading programs. All in all, adult programs have much potential for greatly increasing the utilization of the statewide system of vocational education.

Should the state-level problems mentioned above be remedied, the onus would then be on the local educational institutions - vocational, technical, and university - to determine just what the needs of the community are, regarding vocational skill upgrading and community interest programs, and to work out a cooperative approach to meeting those needs. The remaining problem of providing counseling and placement services during the evening hours, when adult vocational students need them and can take advantage of them, calls for a cooperative approach of state and local vocational educators.

Articulation

Program articulation between vocational education (secondary) and technical education (postsecondary) in South Carolina has, until recently, been largely restricted to local efforts or to special curriculum development projects having articulation as a project objective.

Since 1972, the vocational centers and technical colleges in the six county Appalachian region of the state have been involved in such a project, which sought to develop self-paced curricula in two programs (Refrigeration, Air Conditioning, and Heating and Machine Shop). One of the primary objectives of this project was to base the program content on behavioral objectives, or competencies, developed by teams of vocational and technical teachers.

Procedures and record forms were developed to allow vocational teachers to keep track of individual students progress, in terms of modules, and to send copies of these to their counterparts in the technical colleges where the students enrolled upon leaving the vocational centers. By using the records, the technical teachers could place such students in the postsecondary program at the exact point where they had exited the secondary program. In 1976, these materials were introduced into eight other counties in the state.

Another project recently funded by the Office of Vocational Education is designed to produce content outlines for parallel secondary and postsecondary curricula for six program areas. Performance profiles will be used to determine the placement of secondary graduates in the corresponding postsecondary program. These vocational research materials will be developed and implemented in a vocational center and a technical college in a single South Carolina county.

Throughout the years, local efforts to achieve vocational-technical program articulation have been attempted. Some of these have been more successful than others and have implemented working procedures to assure program parallelism and advanced placement of vocational graduates in technical programs. Some vocational technical teachers sit on each other's program advisory committee, or have common advisory committees and joint meetings.

Where efforts such as these have been encouraged and undertaken in good faith, they have had many positive results. However, all the activities described have been local, or regional, and have had an understandably limited impact on the two systems. Thus far, local practices and state-level discussions have resulted in no formal state-level agreements.

Recently, however, the State Board for Technical and Comprehensive Education has become a member of Vocational-Technical Education Consortium of States (V-TECS). The Office of Vocational Education has been a member of V-TECS for several years and has received the catalogs of occupational competencies that have been produced by the various consortium members at date. In several programs, the Office has adapted or developed learning materials based on the competencies in the catalogs.

The V-TECS catalogs, especially now that the technical education system has access to them, seem to be the ideal foundation upon which the two systems can base any statewide agreements for program articulation and a standardized, consistent approach to advanced placement of vocational graduates in technical programs. V-TECS has already provided some impetus for sharing of faculty staff development activities. Current plans of the Office of Vocational Education to provide inservice training to teachers or performance-based vocational education and the use of V-TECS catalogs include technical, as well as vocational teachers. Through the use of V-TECS catalogs further cooperative efforts in the development of learning materials could be possible in the future. Such efforts would make fully-articulated vocational-technical programs a reality.

The implementation of standardized curricula based on V-TECS also makes internal articulation (vocational center with vocational center or TEC with TEC) easy to achieve within each system. Although local conditions sometimes require variations from a standardized curriculum, the competency-based V-TECS approach is flexible enough to allow these variations and yet provide a standardized basic curriculum acceptable to most areas of the state. This feature make student relocation a far simpler task for both the student and the new teacher.

On the other end of the articulation spectrum TEC to university, provisions are now in effect which allow TEC graduates from any accredited associated degree program to apply all credits earned toward the baccalaureate degree (Bachelor of General Studies) offered by the University of South Carolina College of General Studies.

Other four-year colleges in South Carolina, both public and private, allow the transfer of TEC associate degree credits toward similar baccalaureate degrees.

The Office of Vocational Education and the State Board for Technical and Comprehensive Education have made progress over the past few years toward the full articulation of secondary and postsecondary programs. Much of the credit for this progress must go to the South Carolina Advisory Council for Vocational and Technical Education, which has assisted and encouraged the leadership of both systems in their efforts to establish and maintain the rapport necessary to achieve program articulation. By inviting staff members from both systems to its regular meetings, by sponsoring activities directly concerned with program articulation, such as seminars and statewide studies, and by its early establishment of program articulation between the two systems as a primary goal, the Advisory Council has been a major factor in keeping communications open between vocational and technical education in South Carolina.

Professional Development and Teacher Education

The earlier review of secondary vocational teacher education in South Carolina has revealed several weaknesses and some inconsistencies in the system.

In general:

(1) There is no clear delineation of inservice and preservice roles and responsibilities of teacher educators, the state consultants and supervisors.

(2) There is insufficient coordination of teacher education activities within and outside the Department of Education.

(3) Some of the vocational teacher education policies contained in the "State Plan for Vocational and Technical Education" are either too ambitious or not manageable.

The following list of teacher education policies was taken from the FY 1979 "State Plan for Vocational and Technical Education;" it will illustrate discrepancies between State Plan policies and teacher education practices.

Policies	Practices
1. The State Director shall recommend allocations of federal and state funds for this purpose to teacher education institutions provided they submit an annual plan outlining activities to be performed to meet inservice/preservice training needs identified by the Office of Vocational Education.	Although a survey was conducted to identify teacher education needs and establish priorities, the results were insufficient; thus, no list of formally established preservice and inservice needs exists. Also, no annual plans from teacher education institutions exist.
2. Selected teacher education institutions will be requested to submit plans to address priority training needs. Plans will be submitted to the State Director for review six months prior to beginning of the next fiscal year.	Federal and state funds could not possibly have been allocated based on annual plans from teacher education institutions, because these plans do not exist.
3. The Office of Vocational Education shall evaluate proposed activities and overall plans.	
4. In the event the plan submitted by the institute is not approved, the institution shall be advised of deficiencies in the plan and be given 30 days for revision.	
5. The State Department shall advise institutions within 60 days after receiving federal funding whether or not the plan is approved.	
6. The Office of Vocational Education will provide the services of a Teacher Education Consultant to: (1) coordinate an annual needs assessment for training needs, (2) coordinate teacher activities sponsored by the Office of Vocational Education and (3) coordinate an annual evaluation of professional development activities in the state.	No coordination or evaluation of teacher education activities sponsored by the Office of Vocational Education is done by the State Teacher Education Consultant.

7. Teacher education personnel shall provide the Director, Office of Vocational Education, a semi-annual report at the end of January and June indicating the extent to which activities outlined in the institutions' teacher education plans were accomplished.	There are no formal guidelines for the preparation of reports; this results in inconsistency among the reports. Reports are not received with any degree of regularity from teacher education institutions.

In addition to these discrepancies between teacher education policies and practices, Clemson University was found to be the only institution with a formal agreement with the Department of Education for teacher education.

In the light of a similar review of secondary vocational staff development in South Carolina, it appears that efforts to provide staff development training has been limited. Aside from federal programs for such training, there are no regularly scheduled activities. Most of the training is arranged at the discretion of section chiefs or results from the initiative of individual staff members seeking to improve their professional capabilities. Furthermore, after a careful review of the FY 1979 South Carolina "State Plan for Vocational and Technical Education," there is no evidence of a plan for staff development in the future, other than as it has been provided for in the past. A synopsis of the problems in this area follows.

The State Department of Education is viewed as the foremost proponent of education. However, in regard to the use of an organized program of educational activities designed to improve the professional capabilities of its staff, the State Department of Education's Office of Vocational Education has placed little emphasis on such activities in the professional development of the employees over which it has operational control.

For example, there is no single individual in the Office of Vocational Education who has overall responsibility for the management and coordination of staff development activities. Also, there is no formal Office of Vocational Education program for providing individual staff development plans which would be directed at improving professional and administrative skills based on an analysis of an individual's current abilities and job performance. Incentives of any kind for the professional development of employees are non-existent. Employees who participate in staff development activities do so on their own initiative, after working hours (or while on annual leave), at their own expense, and in a program of their choice (which may or may not be relevant to improving job skills).

In summary, the situation exists in which the Office of Vocational Education has no organized staff development program and, as a matter of policy, does not encourage its employees to participate in such activities. The development of human resources is an important aspect of any viable organization, and should be supported through formal procedures to encourage staff development.

The responses to items pertaining to teacher training and staff development on the NES Educator Survey indicate that the vocational and technical education instructional staff believe that teacher training and staff development in South Carolina could be improved. When asked, "To what extent are vocational or technical teacher training courses made available to you?" 65% of the vocational teachers and 89% of the technical teachers indicated that the courses were available to a moderate or small extent, or not available at all.

To determine teacher's perceptions of the quality and effectiveness of teacher training courses, NES asked the following: "To what extent do the teacher training courses offered meet your needs in keeping up-to-date with your program needs?" The responses were similar to those given for the first question: 63% of the vocational teachers and 82% of the technical teachers indicated that the courses met their needs to a moderate or small extent, or did not meet them at all.

Teachers' perceptions of the accessibility of professional development or graduate courses were slightly more favorable. When asked "To what extent is there adequate access to professional development or graduate courses appropriate for your needs?" 64% of the vocational teachers and 71% of the technical teachers responded that there was moderate, small, or no access at all to these courses.

NES concluded from these findings that teacher training and staff development programs were areas within the vocational and technical education systems in need of improvement, and made the following general recommendation: "Increase the availability and effectiveness of staff development and teacher training programs." In a later section of the report concerning problem areas related to program input, NES made two specific recommendations for teacher training and staff development:

(1) Review the (teacher training) programs now in existence to determine what percentage of all types of educators are utilizing them and to what extent they are effective in aiding the teachers. Also, survey the educators to determine the areas of need and their reactions to inservice teacher training programs.

(2) Review the opportunities (professional development and/or graduate courses) currently available to educators of all types. Determine why more technical educators do not have access to these programs. Also survey all educators in order to determine their level of

awareness of these opportunities, whether they would take advantage of such opportunities if they were available, and what types of programs they would like to see offered. Determine whether the problem is insufficient publicity for existing programs or a need for development of new programs.

Having reviewed all aspects of vocational education faculty-staff development as it exists in South Carolina, including staff development on both state and local levels and teacher training, it is evident that there are problems in all three areas. Techers training suffers from a lack of both enforced (and enforceable) requirements by the Office of Vocational Education for activities to meet preservice and inservice needs to be performed by the teacher training institutions receiving federal and state funds for this purpose. Staff development activities for state-level personnel lack both direction and support from state agency management, nor does the Office of Vocational Education provide planning and leadership for professional development activities for local administrative personnel.

The NES Educator Survey indicated that teacher training courses were no more than "moderately available", to more than two-thirds of the vocational and technical instructors statewide, according to their responses. Their responses regarding the quality and effectiveness of the teacher training courses offered were similar: over two-thirds of the instructors surveyed indicated that the courses met their needs (in keeping up-to-date with their program needs) only to a moderate extent or less. And the instructors' perception of the accessibility of appropriate professional development or graduate courses were only slightly more favorable.

When all the information available is considered, the area of vocational faculty and staff development, on both secondary and postsecondary levels, is apparently in need of an in-depth review, as recommended by NES. Although both the Office of Vocational Education and the State Board for Technical Education have traditionally made efforts to train teachers and to provide professional development training to their administrative staff members, on state and local levels, the efforts have apparently fallen far short of meeting the needs of vocational and technical personnel. It is not surprising under these circumstances that approximately 45% of the teachers in the NES survey were for the most part unfamiliar with state policies or guidelines.

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ASSESSMENT OF VOCATIONAL EDUCATION NEEDS

Program Relevance

To determine the relevancy of vocational programs in response to the needs of business and industry.
To assess the effectiveness of local vocational education advisory committees.
To increase the involvement of business and industry in vocational education.
To improve employment data information.
To identify the State's new and emerging occupations.
To provide and maintain up-to-date facilities, equipment and materials for vocational training.

Program Effectiveness

To ensure that vocational programs meet the needs of students and employees.
To determine the specific parameters of inadequate job preparation in occupational programs.
To determine specific affects of pre-vocational training on vocational students.
To improve deficiencies in basic skills.
To improve student placement follow-up data.

Guidance, Counseling and Job Placement

To ensure that effective job placement and guidance services are provided to secondary and adult vocational students.
To improve the ability of prevocational and exploratory programs to assist students in making career decisions.

Teacher Education and Professional Development

To ensure that an effective staff development and teacher training program is available.
To assure that all teachers are aware of the guidelines and standards established for vocational education.
To provide teacher input into the development of guidelines and standards affecting instruction.

Public Relations

To increase public familiarity with vocational education.

Access to Vocational Training

To provide all vocational students appropriate vocational education opportunities.
To eliminate barriers which prevent handicapped persons from attending or being accepted into a vocational education program.

Sex Bias and Stereotyping

To identify efforts to recruit students into non-traditional programs.
To determine the reasons for traditional hiring practices by business and industry.
To identify unfair school practices regarding sex equity.

APPENDIX A

Copies of:

1. Advance letters sent to educators
2. Cover letters sent with questionnaires
3. Follow-up letters

STATE OF SOUTH CAROLINA
DEPARTMENT OF EDUCATION

CYRIL B. BUSBEE
STATE SUPERINTENDENT OF EDUCATION

COLUMBIA

December 30, 1977

Dear Superintendent:

This is to inform you that the Office of Vocational Education is presently conducting a vocational-technical education needs assessment, in order to establish an improved base for long-range planning. When the assessment has been completed next August, vocational education will have been examined in terms of the national perspective, the state context, and the South Carolina system itself, including the Technical Education and Manpower (CETA) systems.

A critical component of this activity is a perceptual overview of vocational education in South Carolina, which will be based on surveys of four target groups: the public; students; educators; and business-industry representatives. The State Department of Education, through the Vocational Research Coordinating Unit, has contracted with the firm of National Evaluation Systems, Inc., of Amherst, Massachusetts, to design, conduct, and report the four surveys.

All district, county, and area superintendents and vocational center directors will receive a copy of the survey, and selected samples of high school and junior high school principals, vocational and pre-vocational teachers, high school seniors, and adult vocational students will be asked to participate as well. Superintendents, directors, principals, and teachers will receive the survey form by direct mail, but high school seniors and adult vocational students will be sampled by school and will participate in groups. When a high school senior class or an adult vocational class has been selected to participate, a representative of National Evaluation Systems will contact the appropriate district superintendent and ask permission to contact the high school principal. Upon contacting the principal, the NES representative will ask that a faculty or staff member in the school be designated as the contact person who will receive, administer, and return the survey forms. Once this individual is designated, the NES representative will contact him or her to work out all the details involved.

I am asking for your assistance in helping to make this activity a successful one. The information which will be provided by the surveys will be one of the most important factors in the overall needs assessment. It will give students and educators an opportunity to express their ideas and concerns about the present system and about the needs and goals of vocational education. I would appreciate your making your principals and vocational directors aware that the surveys will be conducted and that some of them, their teachers, and students may be asked to participate.

National Evaluation Systems and the Office of Vocational Education are distributing the business and industry survey in cooperation with the State Employment Security Commission. This survey will be mailed out around January 20, 1978. The public survey will be done by telephone interview and is due to begin around January 27, 1978. The student and educator surveys are also due to be distributed around January 27. For the direct mailouts there will be one followup, to be sent about two weeks after the initial mailout. This will not apply, of course, to the student survey and the telephone interviews of the public.

Please feel free to contact me if you have any questions regarding this.

Sincerely,

L. L. Lewis, Director
Office of Vocational Education

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INTER-OFFICE MEMORANDUM

STATE BOARD FOR TECHNICAL AND COMPREHENSIVE EDUCATION

DATE: December 30, 1977

TO: Presidents and Directors

FROM: G. William Dudley, Jr.

SUBJECT: Vocational-Technical Education Needs Assessment

This is to inform you that the Office of Vocational Education is presently conducting a vocational-technical educational needs assessment, in order to establish an improved base for long-range planning. When the assessment has been completed next August, vocational-technical education will have been examined in terms of the national perspective, the state context, and the South Carolina system itself, including the Technical Education and Manpower (CETA) systems.

A critical component of this activity is a perceptual overview of vocational-technical education in South Carolina, which will be based on surveys of four target groups: the public; students; educators; and business-industry representatives. The State Department of Education, through the Vocational Research Coordinating Unit, has contracted with the firm of National Evaluation Systems, Inc., of Amherst, Massachusetts, to design, conduct, and report the four surveys.

All presidents and directors, deans, and area commission chairmen will receive a copy of the survey, and selected samples of students and graduates, full-time faculty members, and Central Office staff will be asked to participate as well. All participants will receive the survey form by direct mail.

I am asking for your assistance in helping to make this activity a successful one. The information which will be provided by the surveys will be one of the most important factors in the overall needs assessment. It will give students, faculty, and administrators an opportunity to express their ideas and concerns about the present system and about the needs and goals of vocational-technical education. I would appreciate your making your staff, faculty, and students aware that the surveys will be conducted and that some of them may be asked to participate.

National Evaluation Systems and the Office of Vocational Education are distributing the business and industry survey in cooperation with the State Employment Security Commission. This survey will be mailed out around January 20, 1978. The public survey will be done by telephone interview and is due to begin around January 27, 1978. The student and educator surveys, in which we will be directly involved, are also due to be distributed around January 27. For the direct mailouts there will be one follow-up, to be sent about two weeks after the initial mailout. This will not apply, of course, to the student survey and the telephone interviews of the public.

GWDjr:bhc

STATE OF SOUTH CAROLINA
DEPARTMENT OF EDUCATION

CYRIL B. BUSBEE
STATE SUPERINTENDENT OF EDUCATION

COLUMBIA

January 18, 1978

Dear Employer:

The Office of Vocational Education of the State Department of Education is conducting an assessment of the state's vocational-technical education needs. This activity requires the collection and interpretation of various types of information which will result in a determination of what the vocational-technical education goals of South Carolina ought to be and how well they are being met. Needless to say, the results of this assessment will greatly influence the long-range plans of the Office of Vocational Education.

Probably the most important component of the needs assessment consists of a series of surveys designed to determine South Carolina's vocational education needs as perceived by four groups: the public; students; educators; and representatives of business and industry. This message is to introduce to you the survey questionnaire for business and industry and to stress to you how important you--as a present or future employer of individuals who have received occupational training through a secondary, post-secondary, or manpower program--are to our efforts. The enclosed brochure gives more detailed information on all four of the surveys.

This questionnaire, as well as those designed for the public, students, and educators, has been developed and produced by National Evaluation Systems, Inc., in cooperation with the Vocational Research Coordinating Unit of the State Department of Education. It is self-explanatory and brief, but it will indicate to us your assessment of South Carolina's vocational-technical education system and your ideas about this system's future goals. We have included a stamped, pre-addressed envelope for your convenience in returning the questionnaire once you have answered it.

I appreciate your time and effort in support of this worthwhile activity.

Sincerely,

Charlie G. Williams

Charlie G. Williams
Deputy Superintendent for Instruction

gw

STATE OF SOUTH CAROLINA

DEPARTMENT OF EDUCATION

CYRIL B. BUSBEE
STATE SUPERINTENDENT OF EDUCATION

COLUMBIA

January 27, 1978

Dear Educator:

The Office of Vocational Education of the State Department of Education is conducting an assessment of the state's vocational-technical education needs. This activity requires the collection and interpretation of various types of information which will result in a determination of what the vocational education goals of South Carolina ought to be and how well they are being met. Needless to say, the results of this assessment will greatly influence the long-range plans of the Office of Vocational Education.

Probably the most important component of the needs assessment consists of a series of surveys designed to determine South Carolina's vocational-technical education needs as perceived by four groups: the public; students; representatives of business and industry; and educators. This message is to introduce to you the survey questionnaire for educators and to stress to you how important you—as an educator concerned with the vocational training of South Carolinians—are to our efforts. The brochure you received earlier gives more detailed information on all four of the surveys.

This questionnaire, as well as those designed for business and industry, the public, and students, has been developed and produced by National Evaluation Systems, Inc., in cooperation with the Vocational Research Coordinating Unit of the State Department of Education. It is self-explanatory and brief, but it will indicate to us your assessment of South Carolina's vocational-technical education system and your ideas about this system's future goals. We have included a stamped, pre-addressed envelope for your convenience in returning the questionnaire once you have answered it.

I appreciate your time and effort in support of this worthwhile activity.

Sincerely,

Charlie G. Williams
Charlie G. Williams
Deputy Superintendent for Instruction

gw

STATE OF SOUTH CAROLINA
DEPARTMENT OF EDUCATION

CYRIL B. BUSBEE
STATE SUPERINTENDENT OF EDUCATION

COLUMBIA

January 27, 1978

Dear Student:

The State Department of Education is doing a study of the state's vocational-technical education needs. This requires the collection of several kinds of information which we will use to find out what South Carolina's vocational-technical education goals should be and if we are reaching these goals.

Our best source of information is people: the public; business and industry representatives; educators; and students. We are sending different questionnaires to each of these four groups of people. Your teacher has a brochure available which gives more information about the study and the questionnaires. All of the questionnaires were developed and produced by National Evaluation Systems, Inc., for the State Department of Education.

You and your classmates have been chosen to answer the student questionnaire. This message is to stress to you how important you and your ideas are to our study. Although the questionnaire is self-explanatory and brief, it will help us to find out what your opinions are about South Carolina's vocational-technical education system. When you have completed the questionnaire, please return it to your teacher, who will help you with any questions you may have.

I appreciate your time and effort in support of this study.

Sincerely,

Charlie G. Williams
Charlie G. Williams
Deputy Superintendent for Instruction

bl

INTER-OFFICE MEMORANDUM

STATE BOARD FOR TECHNICAL AND COMPREHENSIVE EDUCATION

DATE: January 27, 1978

TO: Presidents and Directors, Deans, Area Commission Chairmen, Faculty Members and Central Office Personnel

FROM: G. William Dudley, Executive Director

SUBJECT: Vocational-Technical Education Needs Assessment

The State Board for Technical and Comprehensive Education is working with the Office of Vocational Education of the State Department of Education in conducting an assessment of the state's vocational-technical education needs. This activity requires the collection and interpretation of various types of information, which will result in a determination of what the vocational-technical education goals of South Carolina ought to be and how well they are being met. Needless to say, the results of this assessment will have an impact on the long-range plans of both TEC and the Office of Vocational Education.

Probably the most important component of the needs assessment consists of a series of surveys designed to determine South Carolina's vocational-technical education needs-as perceived by four groups: the public; students, representatives of business and industry; and educators. This message is to introduce to you the survey questionnaire for educators and to stress to you how important you--as an educator concerned with the technical training of South Carolinians--are to our efforts. The brochure you received earlier gives more detailed information on all four of the surveys.

This questionnaire, as well as those designed for business and industry, the public, and students, has been developed and produced by National Evaluation Systems, Inc., in cooperation with the Vocational Research Coordinating Unit of the State Department of Education. It is self-explanatory and brief, but it will indicate your assessment of South Carolina's vocational-technical education system and your ideas about this system's future goals. Included is a stamped, pre-addressed envelope for your convenience in returning the questionnaire once you have answered it.

I appreciate your time and effort in support of this worthwhile activity.

GWDjr:paw

Bill

INTER-OFFICE MEMORANDUM

STATE BOARD FOR TECHNICAL AND COMPREHENSIVE EDUCATION

DATE: January 27, 1978

TO: Students - Graduates

FROM: G. William Dudley, Executive Director

SUBJECT: Vocational-Technical Education Needs Assessment

The State Board for Technical and Comprehensive Education is working with the Office of Vocational Education of the State Department of Education in conducting an assessment of the state's vocational-technical education needs. This activity requires the collection and interpretation of various types of information, which will result in a determination of what the vocational-technical education goals of South Carolina ought to be and how well they are being met. Needless to say, the results of this assessment will have an impact on the long-range plans of both TEC and the Office of Vocational Education.

Probably the most important component of the needs assessment consists of a series of surveys designed to determine South Carolina's vocational-technical education needs as perceived by four groups: the public; representatives of business and industry; educators; and students. This message is to introduce to you the survey questionnaire for students and to stress to you how important you--as a TEC student or recent graduate--are to our efforts. The brochure you received earlier gives more detailed information on all four of the surveys.

This questionnaire, as well as those designed for business and industry, the public, and educators, has been developed and produced by National Evaluation Systems, Inc., in cooperation with the Vocational Research Coordinating Unit of the State Department of Education. It is self-explanatory and brief, but it will indicate your assessment of South Carolina's vocational-technical education system and your ideas about this system's future goals. Included is a stamped, pre-addressed envelope for your convenience in returning the questionnaire once you have answered it.

I appreciate your time and effort in support of this worthwhile activity.

GWDjr:paw

Bill

STATE OF SOUTH CAROLINA
DEPARTMENT OF EDUCATION

CYRIL B. BUSBEE
STATE SUPERINTENDENT OF EDUCATION

COLUMBIA

February 6, 1978

Dear Employer:

You recently received a questionnaire from National Evaluation Systems, Inc., accompanied by an explanatory letter from Dr. Charlie C. Williams, Deputy Superintendent of Education. This questionnaire, in conjunction with those sent to educators, students and the public, will help us in the Office of Vocational Education to determine the state's vocational and technical education needs. Your contribution to this assessment is extremely valuable to us, so won't you take a few minutes to answer and return the questionnaire?

For your convenience, we have enclosed another copy of the questionnaire and a stamped, pre-addressed envelope. I recognize how valuable your time is but truly believe that this effort is well worth it.

Sincerely,

L. L. Lewis, Director
Office of Vocational Education

gw

Enclosure

STATE OF SOUTH CAROLINA
DEPARTMENT OF EDUCATION

CYRIL B BUSBEE
STATE SUPERINTENDENT OF EDUCATION

COLUMBIA

February 7, 1978

Dear Educator:

You recently received a questionnaire from National Evaluation Systems, Inc., accompanied by an explanatory letter from Dr. Charlie C. Williams, Deputy Superintendent of Education. This questionnaire, in conjunction with those sent to employers, students, and the public, will help us in the Office of Vocational Education to determine the state's vocational and technical education needs. Your contribution to this assessment is extremely valuable to us, so won't you take a few minutes to answer and return the questionnaire?

For your convenience, we have enclosed another copy of the questionnaire and a stamped, pre-addressed envelope. I recognize how valuable your time is but truly believe that this effort is well worth it.

Sincerely,

L. L. Lewis, Director
Office of Vocational Education

gw

Enclosure

INTER-OFFICE MEMORANDUM

STATE BOARD FOR TECHNICAL AND COMPREHENSIVE EDUCATION

DATE: February 7, 1978

TO: Presidents and Directors, Area Commission Chairman, Faculty Members, and Central Office Personnel

FROM: James R. Morris, Jr., Associate Executive Director
Division of Instruction

SUBJECT: Vocational-Technical Education Needs Assessment

You recently received a questionnaire from National Evaluation Systems, Inc., accompanied by an explanatory memorandum from Mr. Dudley. This questionnaire, in conjunction with those sent to employers, students, and the public, will help us to determine the state's vocational and technical education needs. Your contribution to this assessment is extremely valuable to us, so won't you take a few minutes to answer and return the questionnaire?

For your convenience, we have enclosed another copy of the questionnaire and a stamped, pre-addressed envelope. I recognize how valuable your time is but truly believe that this effort is well worth it.

gw

Enclosure

INTER-OFFICE MEMORANDUM

STATE BOARD FOR TECHNICAL AND COMPREHENSIVE EDUCATION

DATE: February 7, 1978

TO: Students - Graduates

FROM: James R. Morris, Jr., Associate Executive Director
Division of Instruction

SUBJECT: Vocational-Technical Education Needs Assessment

You recently received a questionnaire from National Evaluation Systems, Inc., accompanied by an explanatory memorandum from Mr. Dudley. This questionnaire, in conjunction with those sent to employers, educators, and the public, will help us to determine the state's vocational and technical education needs. Your contribution to this assessment is extremely valuable to us, so won't you take a few minutes to answer and return the questionnaire?

For your convenience, we have enclosed another copy of the questionnaire and a stamped, pre-addressed envelope. I recognize how valuable your time is but truly believe that this effort is well worth it.

gw

Enclosure

APPENDIX B

Survey Instruments:

1. Student Questionnaire
2. Educator Questionnaire
3. Business and Industry Questionnaire
4. Telephone Interview Instrument

STATE OF SOUTH CAROLINA
DEPARTMENT
OF
EDUCATION
COLUMBIA

ASSESSMENT OF VOCATIONAL AND TECHNICAL EDUCATION IN SOUTH CAROLINA

Please return by February 10, 1978

A Questionnaire for Students

This questionnaire surveys your experience with educational programs offered in South Carolina. The focus of the survey is on two categories of programs of interest to state-level planners. These program categories are:

Vocational Education – which refers to vocational education programs at the secondary and adult levels

Technical Education – which refers to vocational and technical education programs at the post-secondary level

DIRECTIONS: On the following questions, please put a checkmark (√) on the blank line to the left of the response you choose as your answer. Choose only ONE response unless otherwise directed. For example, if the following question were asked, your response might look like this:

In what state do you currently live?

____ A. Georgia
_√_ B. South Carolina
____ C. Florida
____ D. Another state

Throughout this questionnaire, please feel free to make additional comments in the margins.

SDE 26-135-00
(This form becomes obsolete 6/30/78)

1. What is your sex?

____ A. Male
____ B. Female

2. What is your age?

____

3. What county do you live in?

☐ ______________________________

4. What is your ethnic background?

____ A. White
____ B. Black
____ C. Other

5. What is your current student status?

____ A. Full-time student
____ B. Part-time student

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SDE 26-135-00
(This form becomes obsolete 6/30/78)

6. What is your current employment status?

____ A. Employed full-time
____ B. Employed part-time
____ C. Unemployed, seeking work
____ D. Unemployed, not seeking work

7. Which best describes your situation as a student?

____ A. High school/non-vocational
____ B. High school/vocational
____ C. Adult vocational
____ D. Technical education (current or recently completed)

8. Does your school provide guidance services?

____ A. Yes
____ B. No

If no, skip to Question 12.

9. Have you ever used these guidance services?

____ A. Yes
____ B. No

If no, skip to Question 12.

10. Which of the following guidance services were you seeking?

____ A. Personal-social counseling/guidance
____ B. Educational counseling/guidance
____ C. Vocational guidance
____ D. Job placement
____ E. Other (please specify): ____

11. Did you find the experience helpful?

____ A. Yes
____ B. No

12. Have you taken any of the following programs prior to this year? (Check as many as apply.)

____ A. Industrial arts
____ B. Pre-vocational
____ C. Home economics
____ D. I did not take any of these programs.

If you checked D, skip to Question 14.

13. Did taking these courses help you to decide upon an occupation?

____ A. Yes
____ B. No

SDE 26-135-00
(This form becomes obsolete 6/30/78)

14. To what extent do the school buildings meet the needs of the program you are in?

____ A. To a very great extent
____ B. To a great extent
____ C. To a moderate extent
____ D. To a small extent
____ E. Not at all

15. How up-to-date are the equipment and materials that you use in your program?

____ A. The newest available
____ B. Mostly up-to-date
____ C. Mostly out-of-date
____ D. Entirely out-of-date
____ E. No equipment or materials are needed for my program.

16. Do you have a physical handicap?

____ A. Yes
____ B. No

If no, skip to Question 18.

17. Has your physical handicap been a problem for you at your school?

____ A. Yes
____ B. No

SDE 26-135-00
(This form becomes obsolete 6/30/78)

18. If you are familiar with the types of programs listed below, how did you learn about them? (Check the most appropriate response in each column.)

Vocational Education Programs	Technical Education Programs	
____	____	A. Through their publications
____	____	B. Through publicity about them in newspapers, etc.
____	____	C. Through a school guidance counselor
____	____	D. Through friends
____	____	E. Other
____	____	F. I am not familiar with these programs.

19. How well do you think your program is preparing you for future employment or education?

____ A. Very well
____ B. Pretty well
____ C. Not very well
____ D. Not at all

20. How well prepared are your teachers, on a daily basis?

____ A. Always prepared
____ B. Usually prepared
____ C. Usually not prepared
____ D. Never prepared

21. What kind of attitudes do your teachers and counselors generally show toward vocational and technical education programs?

____ A. Very positive
____ B. Slightly positive
____ C. Slightly negative
____ D. Very negative

22. To what extent do these attitudes affect your feelings toward school?

____ A. To a very great extent
____ B. To a great extent
____ C. To a moderate extent
____ D. To a slight extent
____ E. Not at all

23. What do you plan to do after completing your present program of study?

____ A. Go on to a four-year college
____ B. Go on to a technical education college
____ C. Go on to a two-year college other than a technical education college
____ D. Get a full-time job
____ E. Get a part-time job
____ F. Look for a different job
____ G. Continue in my present job
____ H. Other (please specify): ______________________________

24. Are you currently enrolled in the vocational program of your choice?

____ A. Yes
____ B. No
____ C. I am not in a vocational or technical education program.

If you are NOT enrolled in a vocational or technical education program, STOP here. Please review all of the above questions to be sure you have answered each one. Directions for returning this survey are contained in the cover letter. Thank you for your help.

SDE 26-135-00
(This form becomes obsolete 6/30/78)

25. To what extent do you feel that the program you are in will prepare you for the job you want?

____ A. To a very great extent
____ B. To a great extent
____ C. To a moderate extent
____ D. To a small extent
____ E. Not at all
____ F. I don't know.

26. How did you enter the program in which you are presently enrolled?

____ A. I chose my present program.
____ B. I was placed in my present program by school officials.
____ C. My parents/guardian selected my present program for me.

27. Do you feel that the admission policy of your school discriminates against either sex? (Check as many as apply.)

____ A. Yes, it discriminates against males in some programs.
____ B. Yes, it discriminates against females in some programs.
____ C. No, it is equally fair to both sexes.

28. To what extent are the vocational or technical education materials (curriculum materials, course descriptions, publications) used by your school fair to both sexes?

____ A. To a very great extent
____ B. To a great extent
____ C. To a moderate extent
____ D. To a small extent
____ E. Not at all
____ F. I don't know.

29. How well have the basic courses (reading, writing, and arithmetic) you have taken in the past prepared you for your vocational education courses?

____ A. Very well
____ B. Pretty well
____ C. Not very well
____ D. Not at all
____ E. I am not in a vocational program.

30. How well have the basic courses (reading, writing, and arithmetic) you have taken in high school prepared you for your technical college education?

____ A. Very well
____ B. Pretty well
____ C. Not very well
____ D. Not at all
____ E. I am not in a technical college program.

31. How well did your vocational education prepare you for your technical college program?

____ A. Very well
____ B. Pretty well
____ C. Not very well
____ D. Not at all
____ E. I did not take a vocational program before entering a technical college program.
____ F. I am not in a technical college program.

32. Are there any services available at your school to help students find jobs upon completion of their program?

- ____ A. Yes
- ____ B. No
- ____ C. I don't know.

33. Which of the following services are available? (Check as many as apply.)

- ____ A. Vocational counseling
- ____ B. Job listings
- ____ C. On-campus visits by employer representatives
- ____ D. Job placement services
- ____ E. I don't know.

34. Overall, what do you feel to be the major strengths of vocational education programs in South Carolina?

☐

____

____

____

35. Overall, what do you feel to be the major weaknesses of vocational education programs in South Carolina?

☐

____

____

____

36. Overall, what do you feel to be the major strengths of technical education programs in South Carolina?

☐

____

____

____

37. Overall, what do you feel to be the major weaknesses of technical education programs in South Carolina?

☐

____

____

____

Thank you very much for your help. Your answers will provide the state of South Carolina with very valuable information about the effectiveness of the vocational-technical training programs in the state. Please review all of the above questions to be sure you have answered each one. Directions for returning this survey are contained in the cover letter.

SDE 26-135-00
(This form becomes obsolete 6/30/78)

NES Post Office Box 226, Amherst, MA 01002

STATE OF SOUTH CAROLINA
DEPARTMENT
OF
EDUCATION
COLUMBIA

ASSESSMENT OF VOCATIONAL AND TECHNICAL EDUCATION IN SOUTH CAROLINA

Please return by February 10, 1978

A Questionnaire for Educators

This questionnaire surveys your experience with educational programs in South Carolina. The focus of the survey is on two categories of programs of interest to state-level planners. These categories are:

Vocational Education – which refers to vocational education programs at the secondary and adult levels

Technical Education – which refers to vocational and technical education programs at the post-secondary level

DIRECTIONS: On the following questions, please put a checkmark (√) on the blank line to the left of the response you choose as your answer. For example, if the following question were asked, your response might look like this:

In what state do you currently reside?

____ A. Georgia
✓ B. South Carolina
____ C. Florida
____ D. Another state

Throughout this questionnaire, please feel free to make additional comments in the margins.

1. Which of the following best describes your major role in education?

____ A. Administrator
____ B. Teacher
____ C. Counselor
____ D. Other (please specify): ____________________

26-136-00
(This form becomes obsolete 6/30/78)

2. With which type of school do you primarily work?

____ A. High school with vocational or pre-vocational programs
____ B. High school without vocational or pre-vocational programs
____ C. Vocational education center
____ D. Technical education college
____ E. Other (please specify): ____

3. In what county do you work?

☐ ______________________________

4. What is your sex?

____ A. Male
____ B. Female

The following questions focus primarily upon the operation of vocational and technical education programs. Read each question carefully. If you feel familiar with the subject of a question, please answer the question to the best of your ability. If you feel that you are not familiar with what is being asked, or if you feel the question is not appropriate for you, do not answer the question. Continue on to the next question.

5. To what extent do your school buildings meet the needs of the vocational/technical education programs being offered?

____ A. To a very great extent
____ B. To a great extent
____ C. To a moderate extent
____ D. To a small extent
____ E. Not at all

6. How up-to-date are the equipment and materials that you use in your vocational/technical education program?

____ A. The newest available
____ B. Mostly up-to-date
____ C. Mostly out-of-date
____ D. Entirely out-of-date
____ E. No equipment or materials are needed for my program.

7. Are vocational/technical instructional materials produced at the state level (State Department of Education or Technical and Comprehensive Education Central Office) used in your program?

____ A. Yes
____ B. No

If no, skip to Question 10.

8. Are these vocational/technical materials used for any of the following? (Check as many as apply to your program.)

____ A. As supplemental course (program) materials
____ B. As the major training materials for a course (program)
____ C. As reference materials
____ D. As guidelines for developing course outlines
____ E. Other (please specify): ____________________

9. How would you characterize the quality of these vocational/technical materials, compared to other available materials?

____ A. Much better
____ B. A little better
____ C. About the same
____ D. A little worse
____ E. Much worse
____ F. There are no comparable materials available.

SDE 26-136-00
(This form becomes obsolete 6/30/78)

10. To what extent are vocational or technical teacher training courses made available to you? (Check the most appropriate response in each column.)

Vocational	Technical	
____	____	A. To a very great extent
____	____	B. To a great extent
____	____	C. To a moderate extent
____	____	D. To a small extent
____	____	E. Not at all

11. To what extent do the teacher training courses offered meet your needs in keeping up-to-date with your program needs?

____ A. To a very great extent
____ B. To a great extent
____ C. To a moderate extent
____ D. To a small extent
____ E. Not at all

12. To what extent is there adequate access to professional development or graduate courses appropriate for your needs?

____ A. To a very great extent
____ B. To a great extent
____ C. To a moderate extent
____ D. To a small extent
____ E. Not at all

13. Which of the following types of materials and services does your guidance program offer? (Check as many as apply.)

____ A. Personal-social counseling/guidance
____ B. Educational counseling/guidance
____ C. Vocational counseling/guidance
____ D. Job placement
____ E. Other (please specify): ______________________________
____ F. We have no guidance program.

14. How would you characterize the attitudes of the counselors in your institution toward vocational/ technical education?

____ A. Very positive
____ B. Moderately positive
____ C. Neutral
____ D. Moderately negative
____ E. Very negative
____ F. I don't know.

15. How would you characterize the attitudes of the teachers in your institution toward vocational/ technical education?

____ A. Very positive
____ B. Moderately positive
____ C. Neutral
____ D. Moderately negative
____ E. Very negative
____ F. I don't know.

16. Has a special program or set of guidelines been established in your institution to help in placing handicapped and disadvantaged students after completion of their educational program?

____ A. Yes
____ B. No

If no, skip to Question 19.

17. How successful has this program been?

____ A. Very successful
____ B. Moderately successful
____ C. Moderately unsuccessful
____ D. Very unsuccessful

SDE 26-136-00
(This form becomes obsolete 6/30/78)

18. Which of the following apply to your program for placing handicapped and disadvantaged students? (Check as many as apply.)

____ A. Interviews with potential employers are set up for students.
____ B. Companies with a record of hiring the handicapped and disadvantaged are sought out.
____ C. Students are counseled individually on how to interview.
____ D. Students are counseled as a group on how to interview.
____ E. Lists of companies with a record of hiring the handicapped and disadvantaged are given to students.
____ F. Students are accompanied on interviews by a counselor.
____ G. Other (please specify): ____________________
____ H. None of these apply to our program.

19. How accessible, in terms of enrollment openings, are vocational and technical education programs to students in the service area of your institution? (Check the most appropriate response in each column.)

Vocational	Technical	
____	____	A. Very accessible
____	____	B. Easily accessible
____	____	C. Not easily accessible
____	____	D. Inaccessible
____	____	E. I don't know.

20. To what extent do you feel that males and females have EQUAL ACCESS to vocational and technical education programs? (Check the most appropriate response in each column.)

Vocational	Technical	
____	____	A. To a very great extent
____	____	B. To a great extent
____	____	C. To a moderate extent
____	____	D. To a small extent
____	____	E. Not at all

21. To what extent do you see the SAME RECRUITMENT PROCEDURES being used to recruit males and females into vocational and technical education programs? (Check the most appropriate response in each column.)

Vocational	**Technical**	
____	____	A. To a very great extent
____	____	B. To a great extent
____	____	C. To a moderate extent
____	____	D. To a small extent
____	____	E. Not at all

22. How well prepared (in terms of basic reading, writing, and math skills) are students for vocational education programs?

____ A. Very well prepared
____ B. Well prepared
____ C. Moderately prepared
____ D. Poorly prepared
____ E. Very poorly prepared

23. How well prepared (in terms of vocational background) for technical education programs are students coming from vocational programs?

____ A. Very well prepared
____ B. Well prepared
____ C. Moderately prepared
____ D. Poorly prepared
____ E. Very poorly prepared

24. How well prepared (in terms of basic reading, writing, and math skills) for technical education programs are students in general?

____ A. Very well prepared
____ B. Well prepared
____ C. Moderately prepared
____ D. Poorly prepared
____ E. Very poorly prepared

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25. To what extent are new programs being developed at your school to meet manpower needs in new and emerging occupations?

____ A. To a very great extent
____ B. To a great extent
____ C. To a moderate extent
____ D. To a small extent
____ E. Not at all

26. How often is the content of programs reviewed and compared to the needs of business and industry to keep programs up-to-date and relevant?

____ A. Quarterly
____ B. Semiannually
____ C. Annually
____ D. Biannually
____ E. Less frequently

27. Does this review include meetings with members of business and industry?

____ A. Yes
____ B. No
____ C. I don't know.

28. Is follow-up data (e.g., job placement information) gathered on program graduates?

____ A. Yes
____ B. No
____ C. I don't know.

29. Do program personnel (teachers, counselors, administrators) have access to an employment data base (e.g., the demand for certain types of employees) at the local or regional level?

____ A. Yes
____ B. No
____ C. I don't know.

30. To what extent do Advisory Program Committees contribute to the effective functioning of vocational and technical programs? (Check the most appropriate response in each column.)

Vocational	Technical	
____	____	A. To a very great extent
____	____	B. To a great extent
____	____	C. To a moderate extent
____	____	D. To a small extent
____	____	E. Not at all

31. What percentage of the graduates from your institution obtain jobs in their areas of training?

____ A. 0-20%
____ B. 21-40%
____ C. 41-60%
____ D. 61-80%
____ E. 81-100%
____ F. I don't know.

32. To what extent are you familiar with the standards for vocational education as stated in the **Defined Minimum Program for South Carolina School Districts?**

____ A. To a very great extent
____ B. To a great extent
____ C. To a moderate extent
____ D. To a small extent
____ E. Not at all

SDE 26-136-00
(This form becomes obsolete 6/30/78)

Vocational/technical areas of study have been grouped into 17 clusters. Each cluster is identified by a number. For Questions 33 to 38, use the appropriate cluster number for your responses. These clusters are not exhaustive in content, so you may have to select a cluster which is most appropriate but does not exactly fit your desired response.

PROGRAM CLUSTERS:

1. **Office Occupations**
    - Secretarial
    - Accounting
    - Clerical
2. **Marketing/Sales**
3. **Agriculture**
    - Forestry
    - Horticulture
    - Turf Management
4. **Animal Sciences**
    - Veterinary
    - Poultry
    - Dairy
5. **Mechanics**
    - Auto Maintenance
    - Diesel Mechanics
    - Power Mechanics
6. **Media & Communications**
    - Radio & TV Broadcasting
7. **Engineering**
    - Civil
    - Mechanical
    - Chemical
    - Electrical
    - Drafting
8. **Graphic Arts**
    - Printing
    - Photography
9. **Computers**
    - Programming
    - Keypunching
    - Data Processing
10. **Allied Health**
    - Assistants
    - Technicians
    - Nursing
11. **Electronics**
    - Radio, TV Repair
12. **Social Services**
    - Child Care
13. **Personal Services**
    - Barbering
    - Cosmetology
    - Shoe Repair
    - Tailoring
14. **Building Trades**
    - Carpentry
    - Masonry
    - Electricians
    - Plumbing
15. **Hotel/Restaurant**
    - Food Services
    - Hotel/Motel Services
16. **Industrial Trades**
    - Machine Shop
    - Tool & Die
    - Sheet Metal Fabrication
    - Heating
    - Air Conditioning, Refrigeration
    - Pipefitting, Welding
17. **Textiles**
    - Industrial Sewing
    - Production Machine Operators
    - Loom Fixers

33. In what vocational education program area does the number of students trained most often exceed employment needs?

______

34. In what vocational education program area does the number of students trained most often fall short of employment needs?

______

35. In what technical education program area does the number of students trained most often exceed employment needs?

______

36. In what technical education program area does the number of students trained most often fall short of employment needs?

______

37. What two areas of business and industry do you think will hire the most vocationally-trained personnel within the next three to five years?

______ ______

38. What two areas of business and industry do you think will hire the most technically-trained personnel within the next three to five years?

______ ______

39. What do you perceive to be the major strengths of the vocational education system in South Carolina?

☐

____

____

____

40. What do you perceive to be the major weaknesses of the vocational education system in South Carolina?

☐

____

____

____

41. What do you perceive to be the major strengths of the technical education system in South Carolina?

☐

____

____

____

42. What do you perceive to be the major weaknesses of the technical education system in South Carolina?

☐

____

____

____

Thank you for taking time to complete this questionnaire. Your answers will provide the state of South Carolina with valuable information about the effectiveness of vocational/technical training programs in the state. Please review your responses, make any additional comments you would like to add, and return the questionnaire in the prepaid envelope which has been provided.

26-136-00
(This form becomes obsolete 6/30/78)

NES Post Office Box 226, Amherst, MA 01002

STATE OF SOUTH CAROLINA
DEPARTMENT
OF
EDUCATION

COLUMBIA

Please return by January 31, 1978

A Questionnaire for Business and Industry Employers

This questionnaire surveys your experience with employees who HAVE COMPLETED vocational and technical education programs in South Carolina. The focus of the survey is on two categories of programs of interest to state-level planners. These program categories are:

Vocational Education – which refers to vocational education at the secondary level
Technical Education – which refers to vocational and technical education at the post-secondary level

DIRECTIONS: On the following questions, please put a checkmark (✓) on the blank line to the left of the response you choose as your answer. For example, if the following question were asked, your response might look like this:

In what state do you currently reside?

____ A. Georgia
__✓__ B. South Carolina
____ C. Florida
____ D. Another state

Throughout this questionnaire, please feel free to make additional comments in the margins.

1. The number in the lower right-hand corner of the label on the top of this page represents the estimated June 1976 full-time employment level of your company operation as identified on the label. If your present full-time employment differs substantially from this estimate, please write in the correct number here:

____

SDE 26-133-00
(This form becomes obsolete 6/30/78)

2. Are you familiar with the vocational and technical training programs in South Carolina?

____ A. Yes
____ B. No

3. Do vocational or technical training programs train students in skills that can be used by your company?

____ A. Yes
____ B. No
____ C. I don't know.

4. Would you hire vocational or technical school graduates if their skills matched your needs?

____ A. Yes
____ B. No

If no, why not? ______________________________

5. Have you visited the local vocational center or technical education college in your present capacity as an employer of vocational or technical graduates? (Check the most appropriate response in each column.)

Vocational (Secondary)	**Technical** (Post-Secondary)	
____	____	A. Often
____	____	B. Occasionally
____	____	C. Seldom
____	____	D. Never

6. Are you, as an employer, interested in obtaining information on the competency level attained by an applicant while in school (assuming the applicant has been specifically trained for the position applied for)?

____ A. Yes
____ B. No

7. Is your company solicited for information or advice on how the local institution(s) (vocational center and/or technical education college) can improve its programs? (Check the most appropriate response in each column.)

Vocational	Technical	
____	____	A. Often
____	____	B. Occasionally
____	____	C. Seldom
____	____	D. Never

8. To what extent do you think that business and industry in South Carolina tends to favor hiring women for jobs traditionally held by females (e.g., secretary, receptionist, etc.) and tends to favor hiring men for jobs traditionally held by men (e.g., machine worker, mechanic, etc.)?

____ A. To a very great extent
____ B. To a great extent
____ C. To a moderate extent
____ D. To a small extent
____ E. Not at all

9. What advantage do you think handicapped graduates of vocational and technical programs have when applying for jobs with business and industry in South Carolina?

____ A. A great advantage
____ B. A slight advantage
____ C. No advantage
____ D. A slight disadvantage
____ E. A great disadvantage

10. Have you ever hired graduates from vocational or technical programs?

____ A. Yes
____ B. No
____ C. I don't know.

11. Approximately how many graduates from each of the following programs have you hired in the last two years? (Write the approximate number in each column.)

Vocational	Technical
A. ______	B. ______

12. If you have hired no vocational or technical program graduates within the last two years, indicate why not below. (Check the most appropriate response in each column.)

Vocational	Technical	
____	____	A. No demand for them in this company
____	____	B. None applied.
____	____	C. Applicants did not seem to have the necessary skills.
____	____	D. Applicants conducted themselves poorly in the job interview.
____	____	E. Applicants displayed poor attitudes toward work.
____	____	F. Other reasons

If you have NOT HIRED any graduates from either of these programs in the last two years, please STOP here. Please review your responses, put the questionnaire in the prepaid envelope provided, and return it as soon as possible.

13. In general, how did the graduates of these programs first make contact with you and/or your business to seek employment? (Check the most appropriate response in each column.)

Vocational	Technical	
____	____	A. Through a school guidance counselor
____	____	B. Through an instructor or supervisor
____	____	C. Through a school job placement service
____	____	D. Through an outside (of school) placement agency
____	____	E. Through friends/family/personal connections of student
____	____	F. Entirely through initiative of student
____	____	G. Entirely through initiative of your personnel office
____	____	H. I don't know.

14. What percentage of the people that you have hired within the last two years from vocational or technical education programs have been placed in positions for which they were specifically trained? (Write the approximate percent in each column.)

Vocational	Technical
A. ______	B. ______

15. How well have these personnel been prepared in the SPECIFIC SKILLS (e.g., ability to use tools and equipment, job knowledge, etc.) for which they were hired? (Check the most appropriate response in each column.)

Vocational	Technical	
____	____	A. Very well
____	____	B. Well
____	____	C. Average
____	____	D. Poorly
____	____	E. Very poorly

16. In general, how would you rate the overall WORK HABITS (e.g., accuracy, productivity, judgment, etc.) of the graduates of these programs? (Check the most appropriate response in each column.)

Vocational	Technical	
____	____	A. Very good
____	____	B. Good
____	____	C. Average
____	____	D. Poor
____	____	E. Very poor

520

17. In general, how would you rate the ATTITUDES TOWARD WORK (e.g., positive attitude, punctuality, dependability, initiative, etc.) of the graduates of these programs? (Check the most appropriate response in each column.)

Vocational	Technical	
____	____	A. Very good
____	____	B. Good
____	____	C. Average
____	____	D. Poor
____	____	E. Very poor

18. How would you rate the attendance records of graduates of vocational or technical programs?

Vocational	Technical	
____	____	A. Excellent
____	____	B. Good
____	____	C. Average
____	____	D. Poor
____	____	E. Very poor

19. What do you perceive to be the primary strengths of the vocational (secondary) training programs in South Carolina?

☐☐ ____

____

20. What do you perceive to be the primary weaknesses of the vocational (secondary) training programs in South Carolina?

☐☐ ____

____

21. What do you perceive to be the primary strengths of the technical (post-secondary) training programs in South Carolina?

☐☐ ______________________________

____

22. What do you perceive to be the primary weaknesses of the technical (post-secondary) training programs in South Carolina?

☐☐ ______________________________

____

Vocational-technical areas of study have been grouped into 17 clusters. Each cluster is identified by a number. For Questions 23 to 27, use the appropriate cluster numbers for your responses. These clusters are not exhaustive in content, so you may have to select a cluster which is most appropriate but does not exactly fit your desired response.

PROGRAM CLUSTERS:

1. **Office Occupations**
    - Secretarial
    - Accounting
    - Clerical
2. **Marketing/Sales**
3. **Agriculture**
    - Forestry
    - Horticulture
    - Turf Management
4. **Animal Sciences**
    - Veterinary
    - Poultry
    - Dairy
5. **Mechanics**
    - Auto Maintenance
    - Diesel Mechanics
    - Power Mechanics
6. **Media & Communications**
    - Radio & TV Broadcasting
7. **Engineering**
    - Civil
    - Mechanical
    - Chemical
    - Electrical
    - Drafting
8. **Graphic Arts**
    - Printing
    - Photography
9. **Computers**
    - Programming
    - Keypunching
    - Data Processing
10. **Allied Health**
    - Assistants
    - Technicians
    - Nursing
11. **Electronics**
    - Radio, TV Repair
12. **Social Services**
    - Child Care
13. **Personal Services**
    - Barbering
    - Cosmetology
    - Shoe Repair
    - Tailoring
14. **Building Trades**
    - Carpentry
    - Masonry
    - Electricians
    - Plumbing
15. **Hotel/Restaurant**
    - Food Services
    - Hotel/Motel Services
16. **Industrial Trades**
    - Machine Shop
    - Tool & Die
    - Sheet Metal Fabrication
    - Heating
    - Air Conditioning, Refrigeration
    - Pipefitting, Welding
17. **Textiles**
    - Industrial Sewing
    - Production Machine Operators
    - Loom Fixers

23. Of the personnel you have hired in the last two years from vocational-technical programs, for what areas were they HIRED? (List the three most frequent areas in order of frequency, beginning with the most frequent.)

A. ______ B. ______ C. ______

Most frequent

24. For what areas were they TRAINED? (List the three most frequent areas in order of frequency, beginning with the most frequent.)

A. ______ B. ______ C. ______

Most frequent

25. For what areas do you find it difficult to employ trained personnel? (List the three most difficult areas in order of difficulty, beginning with the most difficult.)

A. ______ B. ______ C. ______

Most difficult

26. For what areas is it relatively easy to employ trained personnel? (List the three easiest areas in order, beginning with the easiest.)

A. ______ B. ______ C. ______

Easiest

27. In what areas does your firm anticipate future needs for trained personnel during the next three to five years? (List the three most required areas in order, beginning with the most required.)

A. ______ B. ______ C. ______

Most required

Thank you very much for your help. Your answers will provide the state of South Carolina with very valuable information about the effectiveness of the vocational-technical training programs in the state. Please review your responses, put the questionnaire in the prepaid envelope provided, and return it as soon as possible.

Assessment of Vocational and Technical Education in South Carolina

TELEPHONE SURVEY FOR THE PUBLIC

Hello, my name is ____________________, and I work with National Evaluation Systems in Amherst, Massachusetts. We are presently conducting a survey for the South Carolina State Department of Education. The purpose of this survey is to determine people's knowledge and feelings about the vocational education and technical education programs in South Carolina. You have been selected at random from the residents of South Carolina to be a part of this survey. I would appreciate it if I could talk with you for about 15 minutes to ask you some questions.

[*If respondent does not have time for the interview, ask if you can call back later.*] I understand that you are probably busy, but your participation is important to this survey. Would it be possible to do the interview sometime later this week when you would have more time? [*Be sure to record appointments and keep it!*]

[*If respondent has time for the interview, continue as follows.*] Thank you for taking this time. As I said, this survey is being conducted for the South Carolina State Department of Education to determine people's perceptions of vocational and technical education in the state. In addition to questions concerning these areas, we will also be asking you some general questions about yourself. Your telephone number was chosen at random from the working numbers in South Carolina. We do not have your name, nor do we need it. Your comments will remain anonymous.

3	4	5		6	7	8	9

Date: ____________________

Time: ____________________

Interviewer: ____________________

Respondent's Phone Number: ____________________

Reason for No Interview:
___ No answer
___ Busy
___ Ineligible person
___ Break-off
___ Refusal
___ Other

DIRECTIONS FOR THE INTERVIEWER ARE IN BRACKETS AND ITALICS

Before we get into the actual interview, I need to ask you a few questions. In addition to the general public, we are surveying three other groups of people in South Carolina. These groups are educators, students, and managers in business and industry. Therefore, we are looking for people with other types of backgrounds to interview. So, let me first ask you:

1. Are you in any way associated with public education? [*e.g., teacher, teacher's aide, administrator, etc.*]

10 ☐

___ 1. No
___ 2. Yes [*Interview must end here. Thank person for his/her time and say that he/she cannot be included because he/she is part of another group being surveyed.*]

2. All right, are you presently attending school?

11 ☐

___ 1. No

___ 2. Yes [*Interview must end here. Explanation is same as above.*]

Now that we have determined that you fit into the group we want to survey, we need to ask you for some background information.

3. What is the name of the county you live in?

12 13 ☐☐

____

4. OK., in what year were you born?

14 15 ☐☐

_______ [*If respondent is over 35, ask Question 5. Otherwise, skip to Question 6.*]

5. Do you have any children in the range of 15 to 24 years old?

16 ☐

___ 1. No

17 18 ☐☐

___ 2. Yes → How many? _____

6. Now, can you tell me the highest grade of schooling you have completed?

19 20 ☐☐

____

526

7. O.K., are you presently employed?

___ 1. Yes → ___ 1. Full-time → What kind of work do you do?
___ 2. Part-time

22 ☐

21 ☐

____

23 ☐ 24 ☐ 25 0

___ 2. No → Are you:

___ 1. Retired [*Skip to Question 11.*]
___ 2. Keeping house [*Go on to Question 8.*]
___ 3. Unemployed

22 ☐

↓

Are you seeking employment?

___ 1. Yes
___ 2. No

23 ☐

What kind of work are you trained for?

____

24 ☐ 25 ☐

8. All, right, now I would like to ask you some questions about your job skills—the things you do at work. [*or if not working, the things they could do at work.*]

First, have you ever felt held back at work because you didn't have the skills you wanted?

___ 1. Yes
___ 2. No

26 ☐

9. If you had the opportunity to do so, would you be interested in taking courses to upgrade your present job skills or learn new job skills?

27 ☐

___ 1. No
___ 2. Yes → What kind of skills do you think would be most beneficial to you? [*List the skills.*]

28 ☐ 29 ☐
30 ☐ 31 ☐

____
____
____
____

10. Since you left school, have you ever taken such courses? [*e.g., to upgrade or learn new job skills.*]

32 ☐

___ 1. Yes
___ 2. No

We have now completed the background information and are ready to begin the main part of this interview.

11. First, how familiar would you say you are with South Carolina's vocational and technical education programs? Would you say you are:

33 ☐

___ 1. Very familiar
___ 2. Somewhat familiar
___ 3. Not too familiar [*Skip to Question 17.*]
___ 4. Not familiar at all [*Skip to Question 17.*]

12. Can you tell me how you became familiar with these programs? [*Give the respondent a chance to give you a choice. If they can't do this, prod them with some of the choices listed below. Check as many as apply.*]

34 ☐

___ 1. Through their publications
___ 2. Through publicity about them in newspapers
___ 3. Through enrollment in a program
___ 4. Through a school guidance counselor
___ 5. Through the enrollment of a family member
___ 6. Other [*List:*] ______________________________
____

35 36 ☐☐

13. Next, can you tell me if you or a member of your family ever had vocational guidance counselors recommend any of these programs?

37 ☐

___ 1. No [*If no, skip to Question 17.*]
___ 2. Yes, self
___ 3. Yes, family member
___ 4. Yes, both

14. How would you characterize the advice you [your family member] received from the guidance counselor? Was it:

38 ☐

___ 1. Useful and informative
___ 2. Not useful
___ 3. Misleading

15. What types of programs did the counselor describe as being available? [*Probe, list verbatum.*]

39 40

41 42

____

____

____

Were there any others?

43 44

____

____

____

16. Do you remember whether the counselor(s) offered to give you aptitude or skill tests in order to determine jobs for which you would be best suited?

45

___ 1. Yes
___ 2. No

17. O.K., can you tell me if you have ever looked into any of the state's vocational or technical education programs on your own?

46

___ 1. No [*Go on to Question 18.*]
___ 2. Yes → Did you attend?

47

    ___ 1. Yes [*Go on to Question 18.*]
    ___ 2. No → Why not?

48

        ___ 1. Academic reasons; low grades, etc.
        ___ 2. Accessibility; transportation, etc.
        ___ 3. No openings
        ___ 4. Other: ______________________

49 50

____

[Ask the next two questions only if respondent has children over 15. (Refer to Question 5). Otherwise, skip to Question 20].

18. Can you tell me if any of your children have been enrolled in a vocational education program?

51 ☐

___ 1. Yes
___ 2. No

19. Have THEY been enrolled in a technical education college?

52 ☐

___ 1. Yes
___ 2. No

20. Have YOU ever been enrolled in a vocational education program?

53 ☐

___ 1. Yes
___ 2. No

21. A technical education college?

54 ☐

___ 1. Yes
___ 2. No

[If respondent answered "No" to last four questions, skip to Question 32].

22. Are you presently or have you ever worked in a job for which you were trained in a vocational or technical education program?

55 ☐

___ 1. No [*Skip to Question 32*].
___ 2. Yes

23. To what extent do you feel this training helped you for your job?

56 ☐

___ 1. To a very great extent
___ 2. To a great extent
___ 3. To a moderate extent
___ 4. To a slight extent
___ 5. Not at all

24. How difficult was it for you to find a job after completing your program? Was it:

57 ☐

___ 1. Very difficult
___ 2. Fairly difficult
___ 3. Fairly easy
___ 4. Very easy

25. How good would you say the physical facilities of your program were? Were they:

58 ☐

___ 1. Very good
___ 2. Acceptable
___ 3. Inadequate

26. Did you complete the program(s) you were enrolled in?

___ 1. Yes → When you completed the program(s), was any vocational guidance provided?

59 ☐

60 ☐

___ 1. Yes
___ 2. No

[*Skip to Question 28*].

___ 2. No → Can you tell me the reason(s) you did not complete the program(s)?

60 61 ☐☐

____
____

[*Go on to Question 27*].

27. When you left the program, was any guidance provided?

62 ☐

___ 1. Yes
___ 2. No

28. Were any job placement services available?

63 ☐

___ 1. Yes
___ 2. No

533

29. Were any other types of services provided?

64 ☐

___ 1. No

___ 2. Yes → What were they? [*Probe and list.*]

65 66 ☐☐

____

____

____

[*Ask the next question only of women who have been enrolled in a vocational or technical program. For all others, skip to Question 31.*]

30. In your experience with the vocational or technical education program(s) you were in, did you ever feel that you were treated unfairly or poorly just because you were a woman?

67 ☐

___ 1. No [*Go on to Question 31.*]

___ 2. Yes → Could you tell me a little bit about it? [*Probe and list reasons.*]

68 69 ☐☐
70 71 ☐☐

____

____

____

31. O.K. One purpose of this study is that the state of South Carolina wants to know what people feel could be done to improve its vocational and technical education programs. How about you, what do you think could be done to improve them? [*Probe, list verbatim.*]

72 73 ☐☐
74 75 ☐☐

____

____

____

534

32. Will you tell me what your ethnic background is?

76 ☐

___ 1. White
___ 2. Black
___ 3. Other

33. Do you have a handicap of any sort that keeps you from working in a full-time job?

77 ☐

___ 1. No [*Skip to Question 36.*]
___ 2. Yes → Will you tell me what your handicap is?

78 79 ☐☐ ____________________

34. Have you found any physical barriers which would prevent you from attending a vocational or technical center?

80 ☐

___ 1. No
___ 2. Yes

35. Do you feel that being handicapped may have prevented you from being accepted into a vocational or technical education program?

CARD 2)

10 ☐

___ 1. No
___ 2. Yes

[*Ending question*]

36. Now, just one final question. Some people think that, overall, the state's vocational and technical programs are very valuable and worthwhile and should be continued. Other people think they are not very valuable at all. How about yourself? In general do you think these programs are:

___ 1. Very valuable
___ 2. Pretty valuable
___ 3. Not very valuable
___ 4. Not valuable at all

11
☐

That completes the questions I have to ask you. I would like to thank you for taking your time to answer these questions. Is there anything you would like to ask me about this survey? [*If they ask specific questions about vocational or technical programs, direct them to their local school superintendent.*]

O.K., again I would like to thank you. Good evening!

INTERVIEWER'S COMMENTS:

37. Respondent's sex [*Ask only if you don't know.*]

12 ☐
___ 1. Male
___ 2. Female

Was the respondent:

13 ☐ ___ 1. Cooperative ___ 2. Resistant

14 ☐ ___ 3. Friendly ___ 4. Discourteous

15 ☐ ___ 5. Articulate ___ 6. Uncertain

16 ☐ ___ 7. Confident ___ 8. Hesitant

17 ☐ ___ 9. Understanding of most questions

18 ☐ ___ 10. Enjoying the interview

COMMENTS:

APPENDIX C

Data Tables

538

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages*

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
DEMOGRAPHIC DATA:				
ROLE IN EDUCATION	(724)	(476)	(191)	(57)
Administrator	32.2	27.1	36.6	59.6
Teacher	60.5	65.5	60.2	19.3
Counselor	2.9	4.2	.5	0
Other	4.4	3.2	2.6	21.1
KIND OF SCHOOL	(725)	(477)	(191)	(57)
High school, no vocational education	1.2	1.7	0	0
High school, with vocational education	48.3	73.1	0	0
Vocational education center	16.6	25.2	0	0
Technical education college	26.5	0	100.0	0
Other	7.4	0	0	100.0
RESPONDENTS BY REGION	(684)	(449)	(180)	(50)
Piedmont	24.2	23.8	26.8	26.0
Pee-Dee	15.6	14.1	30.2	22.0
Midlands	37.3	37.2	25.3	44.0
Low Country	23.0	24.9	25.6	8.0
SEX	(728)	(477)	(194)	(57)
Male	63.5	57.9	73.7	75.4
Female	36.5	42.1	26.3	24.6

---

* Number of respondents shown in parentheses.

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported by Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
FACILITIES AND MATERIALS				
HOW WELL DO YOUR BUILDINGS SERVE YOU	(691)	(450)	(191)	(50)
Very great extent	19.7	20.0	20.4	14.0
Great extent	34.9	34.4	35.1	38.0
Moderate extent	33.6	33.3	34.0	34.0
Small extent	11.3	12.0	9.4	12.0
Not at all	.6	.2	1.0	2.0
HOW MODERN IS YOUR EQUIPMENT & MATERIALS	(659)	(418)	(191)	(50)
Newest	12.4	13.6	10.5	10.0
Mostly up to date	74.5	74.6	73.3	78.0
Mostly out of date	11.7	10.5	14.7	10.0
All out of date	.2	0	.5	0
None needed for program	1.2	1.2	1.0	2.0
DO YOU USE MATERIALS DEVELOPED BY THE STATE	(593)	(362)	(183)	(48)
Yes	67.3	84.3	28.4	87.5
No	32.7	15.7	71.6	12.5
ARE THESE MATERIALS USED AS SUPPLEMENTAL MATERIALS	(729)	(477)	(195)	(57)
Yes	34.2	39.4	17.9	45.6
No	65.8	60.6	82.1	54.4

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
ARE THESE MATERIALS USED AS MAJOR TRAINING MATERIALS FOR A COURSE	(729)	(477)	(195)	(57)
Yes	19.6	22.2	12.8	21.1
No	80.4	77.8	87.2	78.9
ARE THESE MATERIALS USED AS REFERENCE MATERIALS	(729)	(477)	(195)	(57)
Yes	31.1	36.3	13.8	47.4
No	68.9	63.7	86.2	52.6
ARE THESE MATERIALS USED AS GUIDELINES FOR DEVELOPING COURSE OUTLINES	(729)	(477)	(195)	(57)
Yes	25.2	28.7	12.8	38.6
No	74.8	71.3	87.2	61.4
ARE THESE MATERIALS USED FOR OTHER PURPOSES	(729)	(477)	(195)	(57)
Yes	1.0	1.0	1.0	0
No	99.0	99.0	99.0	100.0

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
HOW DO THESE MATERIALS COMPARE WITH OTHER AVAILABLE MATERIALS	(390)	(299)	(54)	(37)
Much better	19.0	19.4	20.4	13.5
A little better	24.9	24.7	18.5	35.1
About the same	47.4	46.8	51.9	45.9
A little worse	3.1	3.7	1.9	0
Much worse	.8	1.0	0	0
No comparable materials available	4.9	4.3	7.4	5.4
TEACHER TRAINING:				
HOW AVAILABLE IS VOCATIONAL TEACHER TRAINING	(469)	(373)	(56)	(40)
To a very great extent	10.9	10.7	5.4	20.0
To a great extent	22.4	24.4	8.9	22.5
To a moderate extent	36.0	37.0	23.2	45.0
To a small extent	18.3	18.2	28.6	5.0
Not at all	12.4	9.7	33.9	7.5

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
HOW AVAILABLE IS TECHNICAL TEACHER TRAINING	(388)	(199)	(169)	(20)
To a very great extent	6.7	8.5	4.1	10.0
To a great extent	13.1	17.1	7.7	20.0
To a moderate extent	28.9	29.1	26.6	45.0
To a small extent	28.1	22.6	37.9	0
Not at all	23.2	22.6	23.7	25.0
TO WHAT EXTENT DO TEACHER TRAINING COURSES HELP	(594)	(387)	(168)	(39)
To a very great extent	6.4	6.2	4.2	17.9
To a great extent	22.7	26.1	13.7	28.2
To a moderate extent	34.8	38.5	26.2	35.9
To a small extent	23.6	21.7	30.4	12.8
Not at all	12.5	7.5	25.6	5.1
HOW ACCESSIBLE IS PROFESSIONAL UPDATE	(643)	(413)	(188)	(42)
To a very great extent	10.0	10.9	7.4	11.9
To a great extent	25.2	25.7	20.7	40.5
To a moderate extent	36.7	39.2	33.0	28.6
To a small extent	23.0	19.6	32.4	14.3
Not at all	5.1	4.6	6.4	4.8

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
DOES YOUR GUIDANCE PROGRAM OFFER PERSONAL COUNSELING	(729)	(477)	(195)	(57)
Yes	56.9	57.4	58.5	47.4
No	43.1	42.6	41.5	52.6
DOES YOUR GUIDANCE PROGRAM OFFER EDUCATIONAL COUNSELING	(729)	(477)	(195)	(57)
Yes	71.5	71.1	77.4	54.4
No	28.5	28.9	22.6	45.6
DOES YOUR GUIDANCE PROGRAM OFFER VOCATIONAL COUNSELING	(729)	(477)	(195)	(57)
Yes	72.8	75.3	70.8	59.6
No	27.2	24.7	29.2	40.4
DOES YOUR GUIDANCE PROGRAM OFFER JOB PLACEMENT SERVICES	(729)	(477)	(195)	(57)
Yes	46.2	37.5	67.2	47.4
No	53.8	62.5	32.8	52.6

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
DOES YOUR GUIDANCE PROGRAM OFFER OTHER SERVICES	(729)	(477)	(195)	(57)
Yes	2.9	1.9	4.6	5.3
No	97.1	98.1	95.4	94.7
INSTITUTION HAS NO GUIDANCE PROGRAM	(729)	(477)	(195)	(57)
Yes	1.8	1.7	1.5	3.5
No	98.2	98.3	98.5	96.5
ATTITUDES TOWARDS VOCATIONAL/TECHNICAL EDUCATION:				
WHAT ARE COUNSELORS' ATTITUDES TOWARDS VOCATIONAL/TECHNICAL EDUCATION	(682)	(456)	(183)	(43)
Very positive	53.2	52.0	61.7	30.2
Moderately positive	31.8	33.3	25.7	41.9
Neutral	6.3	6.4	5.5	9.3
Moderately negative	2.9	2.9	1.1	11.6
Very negative	.7	.9	0	2.3
I don't know	5.0	4.6	6.0	4.7

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
WHAT ARE TEACHERS' ATTITUDES TOWARDS VOCATIONAL/TECHNICAL EDUCATION	(703)	(466)	(193)	(44)
Very positive	45.9	40.1	67.4	13.6
Moderately positive	41.4	45.3	28.0	59.1
Neutral	6.5	7.1	3.1	15.9
Moderately negative	3.1	3.9	.5	6.8
Very negative	.7	.6	.5	2.3
I don't know	2.3	3.0	.5	2.3
HANDICAPPED PROGRAMS:				
IS A PROGRAM AVAILABLE FOR HANDICAPPED STUDENTS	(562)	(374)	(148)	(40)
Yes	33.8	33.4	33.1	40.0
No	66.2	66.6	66.9	60.0
HOW SUCCESSFUL HAS THIS PROGRAM BEEN	(176)	(116)	(45)	(15)
Very successful	15.3	12.9	15.6	33.3
Moderately successful	76.1	77.6	75.6	66.7
Moderately unsuccessful	6.8	6.9	8.9	0
Very unsuccessful	1.7	2.6	0	0

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
INTERVIEWS ARE PROVIDED FOR THE HANDICAPPED WITH EMPLOYERS	(729)	(477)	(195)	(57)
Yes	13.7	11.3	17.9	19.3
No	86.3	88.7	82.1	80.7
COMPANIES WITH A RECORD OF HIRING HANDICAPPED ARE SOUGHT	(729)	(477)	(195)	(57)
Yes	10.0	8.4	12.3	15.8
No	90.0	91.6	87.7	84.2
STUDENTS COUNSELED INDIVIDUALLY ON HOW TO INTERVIEW	(729)	(477)	(195)	(57)
Yes	14.4	13.4	14.9	21.2
No	85.6	86.6	85.1	78.9
STUDENTS COUNSELED AS A GROUP ON HOW TO INTERVIEW	(729)	(477)	(195)	(57)
Yes	11.7	10.7	10.8	22.8
No	88.3	89.3	89.2	77.2

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
LISTS OF COMPANIES WHO HIRE HANDICAPPED ARE GIVEN TO STUDENTS	(729)	(477)	(195)	(57)
Yes	3.6	3.6	4.1	1.8
No	96.4	96.4	95.9	98.2
HANDICAPPED ARE ACCOMPANIED ON INTERVIEWS BY COUNSELORS	(729)	(477)	(195)	(57)
Yes	4.0	4.0	3.1	7.0
No	96.0	96.0	96.9	93.0
OTHER PLACEMENT SERVICES ARE OFFERED	(729)	(477)	(195)	(57)
Yes	2.2	2.5	1.0	3.5
No	97.8	97.5	99.0	96.5
NONE OF THE ABOVE APPLY	(729)	(477)	(195)	(57)
Yes	3.3	3.1	4.1	1.8
No	96.7	96.9	95.9	98.2

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
ACCESSIBILITY:				
HOW ACCESSIBLE IN TERMS OF ENROLLMENT OPENINGS ARE VOCATIONAL PROGRAMS IN YOUR AREA	(568)	(433)	(95)	(40)
Very accessible	48.2	45.3	61.1	50.0
Easily Accessible	37.9	40.9	27.4	30.0
Not easily accessible	8.3	7.6	7.4	17.5
Unaccessible	.4	.2	0	2.5
I don't know	5.3	6.0	4.2	0
HOW ACCESSIBLE IN TERMS OF ENROLLMENT OPENINGS ARE TECHNICAL PROGRAMS IN YOUR AREA	(490)	(283)	(184)	(23)
Very accessible	46.5	39.9	57.6	39.1
Easily accessible	38.0	38.2	38.0	34.8
Not easily accessible	6.9	9.2	1.6	21.7
Unaccessible	.6	1.1	0	0
I don't know	8.0	11.7	2.7	4.3
SEX BIAS:				
MALES AND FEMALES HAVE EQUAL ACCESS TO VOCATIONAL PROGRAMS	(605)	(461)	(94)	(50)
To a very great extent	57.5	49.8	70.8	46.4
To a great extent	30.3	34.7	24.0	28.6
To a moderate extent	9.0	12.4	3.1	14.3
To a small extent	2.7	2.4	2.1	10.7
Not at all	.4	.7	0	0

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
MALES AND FEMALES HAVE EQUAL ACCESS TO TECHNICAL PROGRAMS	(511)	(291)	(192)	(28)
To a very great extent	57.5	49.8	70.8	46.4
To a great extent	30.3	34.7	24.0	28.6
To a moderate extent	9.0	12.4	3.1	14.3
To a small extent	2.7	2.4	2.1	10.7
Not at all	.4	.7	0	0
SAME RECRUITMENT PROCEDURES FOR MALES AND FEMALES IN VOCATIONAL PROGRAMS	(558)	(429)	(79)	(50)
To a very great extent	37.3	36.6	40.5	38.0
To a great extent	32.8	35.0	29.1	20.0
To a moderate extent	21.5	21.2	19.0	28.0
To a small extent	7.2	5.6	11.4	14.0
Not at all	1.3	1.6	0	0
SAME RECRUITMENT PROCEDURES FOR MALES AND FEMALES IN TECHNICAL PROGRAMS	(467)	(266)	(173)	(28)
To a very great extent	38.8	30.5	53.2	28.6
To a great extent	33.2	34.2	31.8	32.1
To a moderate extent	19.3	24.8	9.2	28.6
To a small extent	7.5	8.6	5.2	10.7
Not at all	1.3	1.9	.6	0

Educator's Questionnaire: Responses Crosstablulated by
Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
PREPARATION FOR PROGRAMS:				
HOW WELL PREPARED IN BASIC SKILLS FOR VOCATIONAL PROGRAMS	(665)	(449)	(169)	(47)
Very well prepared	.6	.7	.6	0
Well prepared	6.0	6.5	2.4	14.9
Moderately prepared	53.5	57.2	40.8	63.8
Poorly prepared	31.1	28.7	42.0	14.9
Very poorly prepared	8.7	6.9	14.2	6.4
HOW WELL PREPARED IN VOCATIONAL BACKGROUND ARE TECHNICAL STUDENTS	(569)	(364)	(164)	(41)
Very well prepared	6.2	7.1	3.0	9.8
Well prepared	38.3	42.0	26.2	53.7
Moderately prepared	46.4	45.1	53.7	29.3
Poorly prepared	6.7	5.2	10.4	4.9
Very poorly prepared	2.5	.5	6.7	2.4
HOW WELL PREPARED IN BASIC SKILLS FOR TECHNICAL PROGRAMS	(607)	(378)	(191)	(38)
Very well prepared	.8	.8	.5	2.6
Well prepared	11.4	14.6	5.2	10.5
Moderately prepared	56.8	61.4	44.5	73.7
Poorly prepared	24.7	19.0	38.7	10.5
Very poorly prepared	6.3	4.2	11.0	2.6

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Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
MEETING BUSINESS NEEDS:				
TO WHAT EXTENT ARE NEW PROGRAMS DEVELOPED TO MEET BUSINESS NEEDS	(641)	(406)	(190)	(45)
To a very great extent	7.5	4.9	13.2	6.7
To a great extent	30.0	24.1	44.7	20.0
To a moderate extent	38.4	41.6	28.9	48.9
To a small extent	17.5	20.0	11.1	22.2
Not at all	6.7	9.4	2.1	2.2
HOW OFTEN IS PROGRAM CONTENT REVIEWED	(583)	(362)	(174)	(47)
Quarterly	10.1	6.4	19.0	6.4
Semi-annually	11.3	8.0	17.2	14.9
Annually	58.3	62.4	47.7	66.0
Bi-annually	3.8	3.3	4.0	6.4
Less frequently	16.5	19.9	12.1	6.4
DO REVIEWS INCLUDE MEETINGS WITH BUSINESS	(659)	(422)	(190)	(47)
Yes	65.9	57.8	79.5	83.0
No	7.9	9.7	4.2	6.4
I don't know	26.3	32.5	16.3	10.6

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
IS FOLLOW-UP DATA GATHERED ON GRADUATES	(687)	(445)	(192)	(50)
Yes	75.3	71.2	80.2	92.0
No	5.4	4.0	8.9	4.0
I don't know	19.4	24.7	10.9	4.0
DO PROGRAM PERSONNEL HAVE ACCESS TO AN EMPLOYMENT DATA BASE	(676)	(440)	(188)	(48)
Yes	55.0	51.1	56.9	83.3
No	10.4	9.1	14.4	6.3
I don't know	34.6	39.8	28.7	10.4
HOW MUCH DO ADVISORY PROGRAM COMMITTEES CONTRIBUTE TO VOCATIONAL PROGRAMS	(467)	(351)	(70)	(46)
To a very great extent	13.9	11.4	21.4	21.7
To a great extent	28.1	26.5	35.7	28.3
To a moderate extent	35.8	36.8	30.0	37.0
To a small extent	15.4	17.4	7.1	13.0
Not at all	6.9	8.0	5.7	0

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
APPLICABILITY OF TRAINING:				
WHAT PERCENTAGE OF GRADUATES OBTAIN JOBS IN AREA OF TRAINING	(662)	(438)	(185)	(39)
0-20%	5.4	8.0	.5	0
21-40%	11.0	14.2	4.3	7.7
41-60%	15.9	18.3	6.5	33.3
61-80%	15.6	11.4	23.2	25.6
81-100%	10.9	3.7	29.7	2.6
I don't know	41.2	44.5	35.7	30.8
STANDARDS:				
HOW FAMILIAR ARE YOU WITH STANDARDS	(679)	(448)	(179)	(52)
To a very great extent	19.1	21.7	5.0	46.2
To a great extent	18.7	22.1	6.7	30.8
To a moderate extent	17.4	20.1	11.2	15.4
To a small extent	15.8	15.6	19.6	3.8
Not at all	29.0	20.5	57.5	3.8

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
EMPLOYMENT NEEDS:				
WHAT VOCATIONAL AREA PROVIDES MORE GRADUATES THAN INDUSTRY NEEDS	(405)	(291)	(81)	(33)
Office	32.3	31.6	37.0	27.3
Marketing/Sales	3.2	1.7	4.9	12.1
Agriculture	8.4	10.7	2.5	3.0
Animal Science	.7	1.0	0	0
Mechanics	13.1	13.4	8.6	21.2
Media	1.0	.7	2.5	0
Engineering	3.0	3.4	0	6.1
Graphic Arts	3.2	2.7	2.5	9.1
Computers	1.2	1.4	0	3.0
Allied Health	2.7	2.4	4.9	0
Electronics	.7	0	3.7	0
Social Services	6.9	3.8	19.8	3.0
Personal Services	6.4	6.2	4.9	12.1
Building Trades	6.4	8.2	1.2	3.0
Hotel/Restuarant	2.0	2.4	1.2	0
Industrial Trades	4.0	4.5	3.7	0
Textiles	4.7	5.8	2.5	0
WHAT VOCATIONAL AREA DOES NOT PROVIDE ENOUGH GRADUATES FOR INDUSTRY NEEDS	(417)	(293)	(89)	(35)
Office	13.4	13.0	14.6	14.3
Marketing/Sales	3.8	3.4	3.4	8.6
Agriculture	1.2	1.4	1.1	0

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
WHAT VOCATIONAL AREA DOES NOT PROVIDE ENOUGH GRADUATES FOR INDUSTRY NEEDS (continued)				
Animal Sciences	1.9	2.7	0	0
Mechanics	8.6	9.2	6.7	8.6
Media	1.9	2.7	0	0
Engineering	5.8	5.5	6.7	5.7
Graphic Arts	2.4	3.1	1.1	0
Computers	3.8	3.8	5.6	0
Allied Health	7.7	7.5	7.9	8.6
Electronics	2.4	1.4	5.6	2.9
Social Services	1.7	1.0	4.5	0
Personal Services	2.4	3.1	1.1	0
Building Trades	13.7	16.4	5.6	11.4
Hotel/Restaurant	2.2	2.0	1.1	5.7
Industrial Trades	19.9	15.7	32.6	22.9
Textiles	7.2	8.2	2.2	11.4
WHAT TECHNICAL EDUCATION AREA PROVIDES MORE GRADUATES THAN INDUSTRY NEEDS	(297)	(164)	(118)	(15)
Office	25.6	20.1	33.1	26.7
Marketing/Sales	4.7	1.2	9.3	6.7
Agriculture	5.1	5.5	4.2	6.7
Animal Sciences	0	0	0	0
Mechanics	8.4	12.8	2.5	6.7
Media	2.7	3.0	2.5	0
Engineering	11.8	11.6	11.0	20.0

Educator's Questionnaire: Responses Crosstabulated by
Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
WHAT TECHNICAL EDUCATION AREA PROVIDES MORE GRADUATES THAN INDUSTRY NEEDS (continued)				
Graphic Arts	5.7	6.1	5.1	6.7
Computers	3.7	3.7	4.2	0
Allied Health	3.0	4.9	.8	0
Electronics	1.7	1.2	1.7	6.7
Social Services	6.4	1.8	12.7	6.7
Personal Services	4.7	4.9	5.1	0
Building Trades	5.1	8.5	.8	0
Hotel/Restuarant	.3	.6	0	0
Industrial Trades	7.4	9.1	4.2	13.3
Textiles	3.7	4.9	2.5	0
WHAT TECHNICAL EDUCATION AREA DOES NOT PROVIDE ENOUGH GRADUATES FOR INDUSTRY NEEDS	(331)	(177)	(136)	(18)
Office	6.3	3.4	8.8	16.7
Marketing/Sales	2.4	1.7	2.2	11.1
Agriculture	1.5	2.3	.7	0
Animal Sciences	1.2	2.3	0	0
Mechanics	5.7	7.9	1.5	16.7
Media	1.2	2.3	0	0
Engineering	20.5	14.1	30.9	5.6
Graphic Arts	1.8	2.8	.7	0
Computers	9.7	9.0	10.3	11.1
Allied Health	14.8	16.4	14.0	5.6

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
WHAT TECHNICAL EDUCATION AREA DOES NOT PROVIDE ENOUGH GRADUATES FOR INDUSTRY NEEDS (continued)				
Electronics	3.6	5.1	1.5	5.6
Social Services	.3	.6	0	0
Personal Services	1.2	1.1	.7	5.6
Building Trades	5.1	6.8	3.7	0
Hotel/Restaurant	.6	.6	.7	0
Industrial Trades	19.3	16.4	22.8	22.2
Textiles	4.5	7.3	1.5	0
WHAT AREA IN BUSINESS AND INDUSTRY WILL HIRE THE MOST VOCATIONALLY-TRAINED PERSONNEL IN NEXT 3-5 YEARS	(523)	(348)	(131)	(44)
Office	25.8	22.2	32.8	31.8
Marketing/Sales	2.3	1.7	2.3	6.8
Agriculture	1.9	2.6	.8	0
Animal Sciences	.2	.3	0	0
Mechanics	6.9	7.5	7.6	0
Media	.6	.9	0	0
Engineering	2.9	3.4	2.3	0
Graphic Arts	0	0	0	0
Computers	3.8	3.4	5.3	2.3
Allied Health	4.6	4.6	2.3	11.4
Electronics	.8	.9	.8	0
Social Services	.8	1.1	0	0

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
WHAT AREA IN BUSINESS AND INDUSTRY WILL HIRE THE MOST VOCATIONALLY-TRAINED PERSONNEL IN NEXT 3-5 YEARS (continued)				
Personal Services	2.1	1.4	3.1	4.5
Building Trades	19.1	20.4	14.5	22.7
Hotel/Restaurant	2.9	2.6	4.6	0
Industrial Trades	16.8	14.7	22.1	18.2
Textiles	8.6	12.1	1.5	2.3
WHAT IS ANOTHER AREA	(512)	(341)	(126)	(45)
Office	5.7	5.3	4.8	11.1
Marketing/Sales	6.4	5.3	11.1	2.2
Agriculture	.8	1.2	0	0
Animal Sciences	.4	.3	0	2.2
Mechanics	5.9	5.0	10.3	0
Media	.6	.3	1.6	0
Engineering	2.3	2.1	3.2	2.2
Graphic Arts	.8	.9	.8	0
Computers	6.1	5.6	5.6	11.1
Allied Health	6.1	6.5	5.6	4.4
Electronics	1.0	.6	1.6	2.2
Social Services	1.0	1.5	0	0
Personal Services	1.4	1.8	.8	0
Building Trades	16.6	18.8	11.9	13.3
Hotel/Restaurant	5.1	4.4	3.2	15.6
Industrial Trades	25.8	23.8	32.5	22.2
Textiles	14.3	17.0	7.1	13.3

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
WHAT AREA IN BUSINESS AND INDUSTRY WILL HIRE THE MOST TECHNICALLY-TRAINED PERSONNEL IN NEXT 3-5 YEARS	(473)	(274)	(169)	(30)
Office	13.5	9.1	19.5	20.0
Marketing/Sales	2.3	2.6	1.8	3.3
Agriculture	1.9	2.6	.6	3.3
Animal Sciences	.2	.4	0	0
Mechanics	4.4	5.5	2.4	6.7
Media	1.7	1.8	.6	6.7
Engineering	18.4	17.9	21.3	6.7
Graphic Arts	.2	0	.6	0
Computers	18.2	18.2	17.8	20.0
Allied Health	9.5	9.5	10.1	6.7
Electronics	3.2	4.4	1.8	0
Social Services	.2	.4	0	0
Personal Services	.2	0	.6	0
Building Trades	6.3	7.7	4.7	3.3
Hotel/Restaurant	.4	.4	.6	0
Industrial Trades	15.0	14.2	15.4	20.0
Textiles	4.2	5.5	2.4	3.3
WHAT IS ANOTHER AREA	(460)	(269)	(161)	(30)
Office	5.9	3.3	9.3	10.0
Marketing/Sales	2.6	1.1	5.6	0
Agriculture	.2	0	.6	0
Animal Sciences	0	0	0	0
Mechanics	4.1	4.1	4.3	3.3
Media	1.3	1.9	.6	0
Engineering	12.8	11.5	14.3	16.7
Graphic Arts	.4	.7	0	0

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
WHAT IS ANOTHER AREA (continued)				
Computers	15.7	17.8	12.4	13.3
Allied Health	14.3	15.6	13.7	6.7
Electronics	2.4	2.6	1.9	3.3
Social Services	.7	1.1	0	0
Personal Services	.4	.7	0	0
Building Trades	5.9	5.6	5.0	13.3
Hotel/Restaurant	1.3	1.5	1.2	0
Industrial Trades	25.4	24.9	26.7	23.3
Textiles	6.5	7.4	4.3	10.0
WHAT IS THE MAJOR STRENGTH OF VOCATIONAL EDUCATION IN SOUTH CAROLINA	(469)	(229)	(97)	(43)
Good teaching	16.4	17.0	10.3	25.6
Low cost	2.8	3.3	2.1	0
Accessible	14.1	11.6	18.6	23.3
Curriculum variety	14.7	15.8	14.4	7.0
Responsive business and industry	31.3	31.6	39.2	11.6
Good facilities	11.9	12.2	6.2	23.3
Job placement	1.9	2.7	0	0
Other	6.8	5.8	9.3	9.3
WHAT IS ANOTHER STRENGTH	(171)	(120)	(29)	(22)
Good teaching	11.7	13.3	6.9	9.1
Low cost	3.5	2.5	6.9	4.5
Accessible	16.4	13.3	24.1	22.7
Curriculum variety	9.4	8.3	13.8	9.1

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
WHAT IS ANOTHER STRENGTH (contined)	(171)	(120)	(29)	(22)
Responsive business and industry	19.3	20.8	24.1	4.5
Good facilities	22.8	25.8	10.3	22.7
Job placement	3.5	4.2	3.4	0
Other	13.5	11.7	10.3	27.3
WHAT IS THE MAJOR WEAKNESS OF VOCATIONAL EDUCATION SYSTEM	(439)	(301)	(92)	(46)
Poor teaching	8.0	7.0	9.8	10.9
Poor job preparation	3.9	3.7	4.3	4.3
Non-responsive	2.7	2.0	2.2	8.7
Course offerings	10.0	11.3	5.4	10.9
Poor image	16.4	14.6	20.7	19.6
Lack facilities	6.2	6.6	5.4	4.3
Poor counseling	13.0	13.6	10.9	13.0
Lack of variety	1.4	1.7	1.1	0
Lack funding	17.5	16.6	19.6	19.6
Not a 4-year degree	1.4	2.0	0	0
Articulation	6.6	5.6	9.8	6.5
Unfair advantages	.2	0	1.1	0
Other	12.8	15.3	9.8	2.2
WHAT IS ANOTHER AREA	(134)	(88)	(29)	(17)
Poor teaching	18.7	19.3	10.3	29.4
Poor job preparation	6.0	6.8	6.9	0
Not responsive	2.2	0	10.3	0
Course offerings	6.7	8.0	3.4	5.9

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
WHAT IS ANOTHER AREA (continued)				
Poor image	6.7	4.5	13.8	5.9
Lack facilities	5.2	3.4	6.9	11.8
Poor counseling	11.2	10.2	6.9	23.5
Lack of variety	3.7	4.5	3.4	0
Lack funding	13.4	13.6	13.8	11.8
Not 4-year degree	.7	0	0	5.9
Articulation	11.2	12.5	13.8	0
Other	14.2	17.0	10.3	5.9
WHAT IS THE MAJOR STRENGTH OF TECHNICAL EDUCATION IN SOUTH CAROLINA	(385)	(188)	(169)	(28)
Good teaching	10.9	13.3	8.9	7.1
Low cost	6.5	8.5	4.1	7.1
Accessible	19.0	19.7	16.0	32.1
Curriculum variety	10.4	14.9	7.1	0
Responsive business and industry	39.2	24.5	56.2	35.7
Good facilities	6.8	10.6	1.8	10.7
Job placement	1.3	2.7	0	0
Other	6.0	5.9	5.9	7.1
WHAT IS ANOTHER STRENGTH	(148)	(66)	(69)	(13)
Good teaching	15.5	10.6	21.7	7.7
Low cost	8.8	9.1	7.2	15.4
Accessible	12.8	13.6	13.0	7.7

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
WHAT IS ANOTHER STRENGTH (continued)				
Curriculum variety	18.2	22.7	13.0	23.1
Responsive business and industry	20.9	13.6	29.0	15.4
Good facilities	12.2	16.7	7.2	15.4
Job placement	2.0	1.5	2.9	0
Other	9.5	12.1	5.8	15.4
WHAT IS THE MAJOR WEAKNESS OF TECHNICAL EDUCATION SYSTEM	(345)	(152)	(165)	(28)
Poor teaching	10.1	13.2	7.3	10.7
Poor job preparation	2.9	3.9	1.2	7.1
Not responsive	2.9	2.6	2.0	3.6
Course offerings	17.1	26.3	6.7	28.6
Poor image	9.3	7.9	11.5	3.6
Lack facilities	5.2	5.3	6.1	0
Poor counseling	3.8	7.2	1.2	0
Lack of variety	1.7	2.0	.6	7.1
Lack funding	29.6	9.9	50.9	10.7
Not 4-year degree	.9	.7	1.2	0
Articulation	7.0	7.9	4.2	17.9
Unfair advantages	.3	.7	0	0
Other	9.3	12.5	6.1	10.7
WHAT IS ANOTHER AREA	(122)	(33)	(79)	(10)
Poor teaching	18.0	18.2	20.3	0
Poor job preparation	4.1	6.1	3.8	0
Not responsive	4.9	0	6.3	10.0
Course offerings	9.0	9.1	5.1	40.0

Educator's Questionnaire: Responses Crosstabulated by Type of Educator, Reported in Percentages

Questionnaire Items	All Respondents	Public Educators, Local	Technical Educators, State	State Educators
WHAT IS ANOTHER AREA (continued)				
Poor image	11.5	12.1	11.4	10.0
Lack facilities	7.4	6.1	8.9	0
Poor counseling	7.4	12.1	5.1	10.0
Lack of variety	1.6	6.1	0	0
Lack funding	18.9	6.1	25.3	10.0
Not 4-year degree	.8	0	1.3	0
Articulation	9.0	6.1	8.9	20.0
Unfair advantages	.8	0	1.3	0
Other	6.6	18.2	2.5	0

Student Questionnaire: Responses Crosstabulated by Type of Student, Reported in Percentages

Questionnaire Items	All Respondents	High School Nonvocational	High School Vocational	Adult Vocational	Technical
DEMOGRAPHIC DATA:					
AGE	(935)	(237)	(283)	(211)	(204)
15-20	58.0	86.1	93.3	14.2	21.6
21-34	26.7	8.0	5.3	48.8	55.4
Over 34	15.3	5.9	1.4	37.0	23.0
COUNTY	(852)	(216)	(258)	(191)	(187)
Piedmont	24.9	29.6	20.2	28.3	22.5
Pee-Dee	18.2	13.9	16.7	22.5	20.9
Midlands	34.4	33.8	34.9	31.4	37.4
Low Country	22.5	22.7	28.3	17.8	19.3
ETHNIC BACKGROUND	(933)	(237)	(281)	(211)	(204)
White	62.3	61.6	44.1	76.8	74.0
Black	36.4	36.7	55.2	22.3	25.0
Other	1.1	1.7	.7	.9	1.0
STUDENT STATUS	(874)	(233)	(278)	(205)	(158)
Full-time	69.7	91.0	87.4	29.3	59.5
Part-time	30.3	9.0	12.6	70.7	40.5

* Number of respondents shown in parentheses.

Questionnaire Items	All Respondents	High School Nonvocational	High School Vocational	Adult Vocational	Technical
EMPLOYMENT STATUS	(930)	(235)	(283)	(209)	(203)
Full-time	33.3	17.0	10.2	59.3	57.6
Part-time	24.3	34.5	31.1	12.9	14.8
Unemployed, seeking work	25.4	26.8	40.3	12.4	16.3
Unemployed, not seeking work	17.0	21.7	18.4	15.3	11.3
GUIDANCE SERVICES:					
DOES YOUR SCHOOL HAVE GUIDANCE SERVICES	(887)	(231)	(280)	(181)	(195)
Yes	94.7	97.0	98.2	85.6	95.4
No	5.3	3.0	1.8	14.4	4.6
HAVE YOU USED THESE GUIDANCE SERVICES	(855)	(227)	(278)	(160)	(190)
Yes	66.3	85.9	83.5	22.5	54.7
No	33.7	14.1	16.5	77.5	45.3
DID YOU SEEK PERSONAL-SOCIAL GUIDANCE SERVICES	(935)	(237)	(283)	(211)	(204)
Yes	5.7	7.6	9.2	1.9	2.5
No	94.3	92.4	90.8	98.1	97.5

Questionnaire Items	All Respondents	High School Nonvocational	High School Vocational	Adult Vocational	Technical
DID YOU SEEK EDUCATIONAL COUNSELING	(935)	(237)	(283)	(211)	(204)
Yes	47.6	75.9	57.6	10.4	39.2
No	52.4	24.1	42.4	89.7	60.8
DID YOU SEEK VOCATIONAL GUIDANCE	(935)	(237)	(283)	(211)	(204)
Yes	8.0	2.1	15.2	10.0	2.9
No	92.0	97.9	84.8	90.0	97.1
DID YOU SEEK JOB PLACEMENT GUIDANCE	(935)	(237)	(283)	(211)	(204)
Yes	8.6	4.2	7.8	9.0	14.2
No	91.4	95.8	92.2	91.0	85.8
DID YOU SEEK OTHER TYPES OF GUIDANCE	(935)	(237)	(283)	(211)	(204)
Yes	3.1	3.4	3.9	2.8	2.0
No	96.9	96.6	96.1	97.2	98.0
DID YOU FIND THE EXPERIENCE HELPFUL	(623)	(201)	(245)	(65)	(112)
Yes	93.3	92.0	95.9	89.2	92.0
No	6.7	8.0	4.1	10.8	8.0

Questionnaire Items	All Respondents	High School Nonvovational	High School Vocational	Adult Vocational	Technical
BACKGROUND COURSES:					
DID YOU TAKE ANY INDUSTRIAL ARTS COURSES BEFORE THIS YEAR	(935)	(237)	(283)	(211)	(204)
Yes	7.9	5.5	12.4	4.3	8.3
No	92.1	94.5	87.6	95.7	91.7
DID YOU TAKE ANY PRE-VOCATIONAL COURSES BEFORE THIS YEAR	(935)	(237)	(283)	(211)	(204)
Yes	22.5	19.0	49.1	6.2	5.4
No	77.5	81.0	50.9	93.8	93.6
DID YOU TAKE ANY HOME ECONOMICS COURSES BEFORE THIS YEAR	(935)	(237)	(283)	(211)	(204)
Yes	22.2	32.9	28.6	13.7	9.8
No	77.8	67.1	71.4	86.3	90.2
I TOOK NONE OF THESE COURSES BEFORE THIS YEAR	(935)	(237)	(283)	(211)	(204)
Yes	52.9	47.7	25.1	72.5	77.5
No	47.1	52.3	74.9	27.5	22.5

Questionnaire Items	All Respondents	High School Nonvocational	High School Vocational	Adult Vocational	Technical
TAKING THESE COURSES HELPED DECIDE ON AN OCCUPATION	(500)	(139)	(235)	(70)	(56)
Yes	49.8	27.3	64.3	44.3	51.8
No	50.2	72.7	35.7	55.7	48.2
FACILITIES AND EQUIPMENT:					
WHAT EXTENT SCHOOL BUILDINGS MEET NEEDS OF MY PROGRAM	(890)	(223)	(272)	(200)	(195)
To a very great extent	20.2	14.8	13.6	39.5	15.9
To a great extent	36.7	29.6	40.4	35.0	41.5
To a moderate extent	31.7	36.3	34.2	21.5	33.3
To a small extent	8.5	14.8	9.2	2.5	6.7
Not at all	2.8	4.5	2.6	1.5	2.5
HOW UP-TO-DATE ARE EQUIPMENT AND MATERIALS	(908)	(227)	(276)	(204)	(201)
Newest available	19.7	9.7	19.6	31.9	18.9
Mostly up-to-date	67.5	68.7	71.7	61.8	66.2
Mostly out-of-date	6.7	12.3	4.3	2.0	8.5
Entirely out-of-date	1.2	2.6	.4	1.0	1.0
No equipment needed	4.8	6.6	4.0	3.4	5.5

Questionnaire Items	All Respondents	High School Nonvocational	High School Vocational	Adult Vocational	Technical
HANDICAP:					
DO YOU HAVE A HANDICAP	(918)	(229)	(277)	(211)	(201)
Yes	4.4	1.7	2.9	6.2	7.5
No	95.6	98.3	97.1	93.8	92.5
HAS IT BEEN A PROBLEM FOR YOU AT SCHOOL	(33)	(3)	(8)	(9)	(13)
Yes	33.3	33.3	25.0	11.1	53.8
No	66.7	66.7	75.0	88.9	46.2
LEARNING ABOUT PROGRAMS:					
HOW DID YOU LEARN ABOUT VOCATIONAL PROGRAMS	(653)	(165)	(225)	(176)	(87)
Their publications	16.8	15.2	12.0	18.8	28.7
Publicity in newspapers	10.3	3.0	4.4	24.4	10.3
School guidance counselor	32.9	40.0	50.7	8.5	23.0
Friends	23.9	20.0	21.8	36.9	10.3
Other sources	3.5	1.2	3.1	5.8	2.3
I am not familiar with these programs	12.6	20.6	8.0	4.5	25.3

Questionnaire Items	All Respondents	High School Nonvocational	High School Vocational	Adult Vocational	Technical
HOW DID YOU LEARN ABOUT TECHNICAL PROGRAMS	(578)	(156)	(134)	(98)	(190)
Their publications	23.9	17.9	23.9	29.6	25.8
Publicity in newspapers	12.5	9.6	11.2	15.3	14.2
School guidance counselor	21.6	28.2	21.6	9.2	22.6
Friends	18.5	10.3	14.9	23.5	25.3
Other sources	6.2	3.2	9.0	7.1	6.3
I am not familiar with these programs	17.3	30.8	19.4	15.3	5.8
HOW WELL IS YOUR PROGRAM PREPARING YOU FOR FUTURE	(920)	(231)	(281)	(205)	(203)
Very well	39.2	20.3	38.8	62.9	37.4
Pretty well	51.7	61.5	56.2	30.7	55.7
Not very well	7.0	14.7	3.9	4.4	4.9
Not at all	2.1	3.5	1.1	2.0	2.0
TEACHER ATTITUDES:					
HOW WELL PREPARED ARE YOUR TEACHERS	(922)	(231)	(279)	(209)	(203)
Always prepared	55.1	46.3	50.9	79.9	45.3
Usually prepared	42.3	49.8	47.7	18.7	50.7
Usually not prepared	1.6	3.5	.4	1.0	2.0
Never prepared	1.0	.4	1.1	.5	2.0

Questionnaire Items	All Respondents	High School Nonvocational	High School Vocational	Adult Vocational	Technical
TEACHER ATTITUDES TOWARD VOCATIONAL AND TECHNICAL PROGRAMS	(921)	(231)	(279)	(208)	(203)
Very positive	74.4	61.0	73.5	91.8	72.9
Slightly positive	21.9	31.6	24.4	7.7	22.2
Slightly negative	3.3	6.1	1.8	.5	4.9
Very negative	.4	1.3	.4	0	0
TO WHAT EXTENT DO ATTITUDES AFFECT YOU	(912)	(230)	(275)	(206)	(201)
Very great extent	31.9	19.6	26.5	50.5	34.3
Great extent	34.5	33.5	37.5	35.0	31.3
Moderate extent	21.8	29.6	24.4	10.2	21.4
Slight extent	6.0	10.0	5.8	0	8.0
Not at all	5.7	7.4	5.8	4.4	5.0
FUTURE PLANS:					
WHAT WILL YOU DO AFTER COMPLETING PROGRAM	(905)	(230)	(268)	(207)	(200)
Four-year college	23.6	41.3	22.4	8.2	21.0
Technical college	16.5	20.0	28.0	5.8	8.0
Other two-year college	6.3	9.6	8.2	4.8	1.5
Full-time job	22.2	14.3	25.7	21.3	27.5
Part-time job	4.0	2.6	3.7	7.2	2.5
Different job	6.3	.9	2.2	16.4	7.5
Continue present job	12.7	2.6	2.6	28.0	22.0
Other	8.4	8.7	7.1	8.2	10.0

Questionnaire Items	All Respondents	High School Nonvocational	High School Vocational	Adult Vocational	Technical
ARE YOU IN PROGRAM OF YOUR CHOICE	(913)	(231)	(274)	(209)	(199)
Yes	61.4	19.5	80.7	85.6	58.3
No	15.3	26.4	12.0	3.3	19.6
Not in vocational or technical program	23.2	54.1	7.3	11.0	22.1
TO WHAT EXTENT WILL PROGRAM PREPARE YOU	(596)	(52)	(234)	(182)	(128)
Very great extent	30.0	23.1	27.8	40.7	21.9
Great extent	34.2	23.1	35.9	30.8	40.6
Moderate extent	20.8	19.2	21.8	13.7	29.7
Small extent	7.9	19.2	9.8	3.8	5.5
Not at all	2.5	7.7	1.7	3.3	.8
I don't know	4.5	7.7	3.0	7.7	1.6
PROGRAM ENTRANCE:					
HOW DID YOU GET INTO PROGRAM	(599)	(51)	(234)	(185)	(129)
I chose it	92.7	74.5	90.6	98.4	95.3
Placed by school officials	5.8	17.6	8.1	1.1	3.9
Placed by parents	1.5	7.8	1.3	.5	.8

Questionnaire Items	All Respondents	High School Nonvocational	High School Vocational	Adult Vocational	Technical
SEX BIAS:					
DOES YOUR SCHOOL DISCRIMINATE AGAINST MALES	(935)	(237)	(283)	(211)	(204)
Yes	3.0	1.7	6.0	1.4	2.0
No	97.0	98.3	94.0	98.6	98.0
DOES YOUR SCHOOL DISCRIMINATE AGAINST FEMALES	(935)	(237)	(283)	(211)	(204)
Yes	3.9	1.3	8.8	2.4	1.5
No	96.1	98.7	91.2	97.6	98.5
IS YOUR SCHOOL FAIR TO BOTH SEXES	(935)	(237)	(283)	(211)	(204)
Yes	58.4	18.6	70.7	84.8	60.3
No	41.6	81.4	29.3	15.2	39.7
TO WHAT EXTENT ARE MATERIALS FAIR TO BOTH SEXES	(588)	(49)	(233)	(178)	(128)
Very great extent	30.3	28.6	18.9	44.9	31.3
Great extent	37.8	22.4	38.2	33.7	48.4
Moderate extent	19.4	26.5	30.0	9.0	11.7
Small extent	2.7	6.1	4.7	0	1.6
Not at all	.5	2.0	.4	.6	0
I don't know	9.4	14.3	7.7	11.8	7.0

Questionnaire Items	All Respondents	High School Nonvocational	High School Vocational	Adult Vocational	Technical
PREPARATION FOR PROGRAMS:					
HOW WELL PREPARED IN BASIC COURSES FOR VOCATIONAL EDUCATION	(589)	(51)	(233)	(178)	(127)
Very well	39.6	31.4	41.6	48.3	26.8
Pretty well	44.5	51.0	50.2	39.3	38.6
Not very well	5.6	3.9	4.7	7.3	5.5
Not at all	1.9	2.0	2.6	1.7	.8
I am not in a vocational program	8.5	11.8	.9	3.4	28.3
HOW WELL PREPARED IN BASIC COURSES FOR TECHNICAL EDUCATION	(572)	(47)	(226)	(171)	(128)
Very well	28.3	21.3	25.2	26.9	38.3
Pretty well	32.9	44.7	32.7	22.2	43.0
Not very well	10.7	12.8	10.2	7.6	14.8
Not at all	1.9	4.3	3.1	.6	.8
I am not in a technical program	26.2	17.0	28.8	42.7	3.1

Questionnaire Items	All Respondents	High School Nonvocational	High School Vocational	Adult Vocational	Technical
HOW WELL DID VOCATIONAL PROGRAM PREPARE FOR TECHNICAL PROGRAM	(560)	(49)	(221)	(167)	(123)
Very well	15.2	10.2	20.8	13.2	9.8
Pretty well	24.8	28.6	36.2	10.8	22.0
Not very well	3.9	6.1	5.0	3.0	2.4
Not at all	2.0	4.1	.5	1.2	4.9
No vocational training	17.3	20.4	.9	9.6	56.1
Not in a technical program	36.8	30.6	36.7	62.3	4.9
JOB PLACEMENT:					
ARE THERE JOB PLACEMENT SERVICES AVAILABLE	(574)	(48)	(223)	(177)	(126)
Yes	61.1	43.8	61.4	50.3	82.5
No	8.0	18.8	10.8	5.1	3.2
I don't know	30.8	37.5	27.8	44.6	14.3
WHAT SERVICES ARE AVAILABLE	(935)	(237)	(283)	(211)	(204)
Vocational counseling	24.6	5.5	38.5	25.6	26.5
Job listings	20.4	3.4	22.3	17.5	40.7
On-campus visits	11.3	.8	13.4	9.0	23.0
Job placement services	20.1	4.6	17.0	22.7	39.7
I don't know	23.1	10.1	29.0	43.1	9.1

Questionnaire Items	All Respondents	High School Nonvocational	High School Vocational	Adult Vocational	Technical
STRENGTHS AND WEAKNESSES:					
WHAT IS MAJOR STRENGTH OF VOCATIONAL EDUCATION IN SOUTH CAROLINA	(317)	(11)	(138)	(116)	(52)
Good teaching	25.6	18.2	31.2	19.8	25.0
Low cost	3.2	0	1.4	5.2	3.8
Accessibility	7.3	0	2.2	12.1	11.5
Curriculum variety	8.2	0	7.2	9.5	9.6
Responsive to business and industry	28.4	54.5	29.0	25.9	26.9
Good facilities	2.2	0	2.9	2.6	0
Job Placement	3.8	0	5.1	3.4	1.9
Other	21.5	27.3	21.0	21.6	21.2
WHAT IS ANOTHER STRENGTH	(60)	(2)	(28)	(23)	(7)
Good teaching	25.0	0	25.0	26.1	28.6
Low cost	5.0	0	0	4.3	28.6
Accessibility	8.3	50.0	0	13.0	14.3
Curriculum variety	11.7	0	14.3	13.0	0
Responsive to business and industry	16.7	0	7.1	30.4	14.3
Good facilities	21.7	50.0	35.7	8.7	0
Other	11.7	0	17.9	4.3	14.3

Questionnaire Items	All Respondents	High School Nonvocational	High School Vocational	Adult Vocational	Technical
WHAT IS MAJOR WEAKNESS OF VOCATIONAL EDUCATION IN SOUTH CAROLINA	(235)	(8)	(107)	(78)	(42)
Poor teaching	14.5	25.0	15.0	9.0	21.4
Poor job preparation	3.0	12.5	1.9	1.3	7.1
Not responsive	.4	0	.9	0	0
Course offerings	11.5	12.5	7.5	17.9	9.5
Poor image	5.5	12.5	5.6	7.7	0
Lack facilities	10.2	12.5	13.1	9.0	4.8
Poor counseling	6.4	12.5	7.5	3.8	7.1
Lack of variety	3.8	12.5	3.7	2.6	4.8
Lack of funding	7.2	0	8.4	7.7	4.8
Not a four-year degree	.9	0	0	1.3	2.4
Articulation	.4	0	.9	0	0
Unfair advantage	1.7	0	2.8	1.3	0
Other	34.5	0	32.7	38.5	38.1
WHAT IS ANOTHER WEAKNESS	(26)	(2)	(4)	(15)	(5)
Poor teaching	7.7	0	25.0	6.7	0
Poor job preparation	3.8	0	0	6.7	0
Course offerings	11.5	0	0	20.0	0
Lack facilities	23.1	0	0	26.7	40.0
Poor counseling	7.7	0	0	13.3	0
Lack of variety	3.8	50.0	0	0	0
Lack of funding	26.9	50.0	75.0	6.7	40.0

Questionnaire Items	All Respondents	High School Nonvocational	High School Vocational	Adult Vocational	Technical
WHAT IS MAJOR STRENGTH OF TECHNICAL EDUCATION IN SOUTH CAROLINA	(204)	(11)	(67)	(35)	(91)
Good teaching	22.5	9.1	23.9	11.4	27.5
Low cost	6.9	0	4.5	0	12.1
Accessibility	4.4	9.1	1.5	11.4	3.3
Curriculum variety	15.7	0	19.4	25.7	11.0
Responsive to business and industry	25.0	27.3	20.9	22.9	28.6
Good facilities	4.4	9.1	4.5	5.7	3.3
Job placement	4.4	9.1	4.5	0	5.5
Other	16.7	36.4	20.9	22.9	8.8
WHAT IS ANOTHER STRENGTH	(38)	(2)	(11)	(6)	(19)
Good teaching	26.3	100.0	45.5	33.3	5.3
Low cost	13.2	0	0	16.7	21.1
Accessibility	10.5	0	0	16.7	15.8
Curriculum variety	15.8	0	9.1	33.3	15.8
Responsive to business and industry	15.8	0	27.3	0	15.8
Good facilities	2.6	0	0	0	2.6
Job placement	5.3	0	0	0	10.5
Other	10.5	0	18.2	0	10.5

Questionnaire Items	All Respondents	High School Nonvocational	High School Vocational	Adult Vocational	Technical
WHAT IS MAJOR WEAKNESS OF TECHNICAL EDUCATION IN SOUTH CAROLINA	(175)	(8)	(49)	(35)	(83)
Poor teaching	16.0	12.5	10.2	14.3	20.5
Poor job preparation	4.6	12.5	6.1	0	4.8
Not responsive	.6	0	2.0	0	0
Course offerings	14.3	12.5	12.2	14.3	15.7
Poor image	2.3	0	0	5.7	2.4
Lack facilities	6.9	0	6.1	5.7	8.4
Poor counseling	4.6	0	4.1	5.7	4.8
Lack of variety	5.1	12.5	6.1	8.6	2.4
Lack of funding	6.3	0	6.1	2.9	8.4
Not four-year degree	4.6	12.5	2.0	2.9	6.0
Articulation	1.7	0	2.0	0	2.4
Other	33.1	37.5	42.9	40.0	24.1
WHAT IS ANOTHER WEAKNESS	(16)	(2)	(1)	(2)	(11)
Poor teaching	18.8	0	100.0	0	18.2
Lack facilities	12.5	0	0	50.0	9.1
Poor counseling	12.5	50.0	0	0	9.1
Lack of funding	12.5	0	0	0	18.2
Articulation	12.5	50.0	0	0	9.1
Other	31.3	0	0	50.0	36.4

Business and Industry Questionnaire: Responses Crosstabulated by Type of Business, Reported in Percentages*

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
FAMILIARITY AND INTEREST:										
ARE YOU FAMILIAR WITH VOCATIONAL AND TECHNICAL PROGRAMS IN SOUTH CAROLINA	(1151)	(108)	(152)	(339)	(46)	(44)	(154)	(63)	(197)	(48)
Yes	88.0	77.8	94.7	94.7	76.1	81.8	83.1	88.9	84.8	87.5
No	12.0	22.2	5.3	5.3	23.9	18.2	16.9	11.1	15.2	12.5
ARE STUDENTS TRAINED IN SKILLS YOU CAN USE	(1142)	(107)	(152)	(334)	(46)	(44)	(151)	(63)	(198)	(47)
Yes	73.2	68.2	87.5	78.7	56.5	56.8	63.6	65.1	70.7	83.0
No	13.0	11.2	9.9	11.7	21.7	18.2	14.6	12.7	15.7	8.5
I don't know	13.7	20.6	2.6	9.6	21.7	25.0	21.9	22.2	13.6	8.5
WOULD YOU HIRE IF SKILLS MATCHED YOUR NEEDS	(1150)	(106)	(151)	(338)	(45)	(45)	(153)	(64)	(199)	(49)
Yes	98.8	99.1	99.3	100.0	97.8	95.6	98.0	100.0	98.0	95.9
No	1.2	.9	.7	0	2.2	4.4	2.0	0	2.0	4.1

* Number of respondents shown in parentheses.

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
DO YOU VISIT YOUR LOCAL VOCATIONAL CENTER AS AN EMPLOYER	(977)	(94)	(123)	(300)	(36)	(38)	(124)	(57)	(163)	(42)
Often	5.4	1.1	6.5	9.0	5.6	2.6	3.2	1.8	5.5	0
Occasionally	23.4	17.0	34.1	34.3	5.6	5.3	16.1	15.8	16.0	21.4
Seldom	18.8	18.1	25.2	22.7	13.9	2.6	13.7	12.3	17.8	21.4
Never	52.3	63.8	34.1	34.0	75.0	89.5	66.9	70.2	60.7	57.1
DO YOU VISIT YOUR LOCAL TECHNICAL CENTER AS AN EMPLOYER	(1057)	(99)	(138)	(297)	(43)	(44)	(143)	(60)	(187)	(46)
Often	7.0	5.1	15.9	8.1	4.7	4.5	2.8	3.3	7.0	0
Occasionally	29.3	21.2	39.1	40.1	16.3	4.5	20.3	18.3	29.4	26.1
Seldom	17.6	15.2	21.7	21.5	9.3	15.9	14.7	15.0	13.4	23.9
Never	46.1	58.6	23.2	30.3	69.8	75.0	62.2	63.3	50.3	50.0
ARE YOU INTERESTED IN COMPETENCY LEVEL OF GRADUATES	(1140)	(106)	(152)	(334)	(46)	(43)	(151)	(64)	(197)	(47)
Yes	82.7	73.6	86.8	86.2	82.6	74.4	77.5	81.3	83.2	89.4
No	17.3	26.4	13.2	13.8	17.4	25.6	22.5	18.8	16.8	10.6

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
IS YOUR COMPANY SOLICITED FOR VOCATIONAL INFORMATION	(982)	(96)	(125)	(297)	(39)	(39)	(123)	(56)	(168)	(39)
Often	8.5	3.1	15.2	15.5	0	2.6	5.7	1.8	3.6	0
Occasionally	23.2	10.4	43.2	34.3	5.1	5.1	13.0	7.1	18.5	17.9
Seldom	18.2	16.7	19.2	22.9	15.4	15.4	13.0	19.6	15.5	15.4
Never	50.1	69.8	22.4	27.3	79.5	76.9	68.3	71.4	62.5	66.7
IS YOUR COMPANY SOLICITED FOR TECHNICAL INFORMATION	(1066)	(104)	(143)	(299)	(45)	(42)	(140)	(59)	(191)	(43)
Often	11.0	4.8	28.0	17.4	0	2.4	5.7	5.1	4.2	0
Occasionally	29.5	17.3	47.6	43.5	15.6	14.3	15.7	15.3	23.6	23.3
Seldom	16.5	17.3	12.6	17.7	15.6	11.9	17.9	13.6	18.3	16.3
Never	43.0	60.6	11.9	21.4	68.9	71.4	60.7	66.1	53.9	60.5
SEX AND HANDICAP BIAS:										
TO WHAT EXTENT ARE MALE AND FEMALE HIRING PRACTICES TRADITIONAL	(1108)	(100)	(148)	(330)	(42)	(44)	(147)	(63)	(192)	(42)
Very great extent	18.1	18.0	14.9	13.9	21.4	15.9	21.8	23.8	21.4	23.8
Great extent	44.9	45.0	48.0	39.7	42.9	54.5	44.2	50.8	49.5	38.1

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
TO WHAT EXTENT ARE MALE AND FEMALE HIRING PRACTICES TRADITIONAL (continued)										
Moderate extent	28.9	34.0	29.7	36.1	28.6	20.5	24.5	14.3	23.4	28.6
Small extent	6.6	2.0	5.4	9.1	7.1	6.8	7.5	9.5	3.6	7.1
Not at all	1.6	1.0	2.0	1.2	0	2.3	2.0	1.6	2.1	2.4
WHAT ADVANTAGE HAVE HANDICAPPED GRADUATES	(1069)	(100)	(143)	(319)	(42)	(42)	(144)	(58)	(179)	(42)
Great advantage	12.8	15.0	16.8	12.2	7.1	11.9	15.3	5.2	12.3	9.5
Slight advantage	30.0	26.0	35.0	35.1	26.2	14.3	24.3	25.9	28.5	35.7
No advantage	32.3	33.0	28.7	33.5	40.5	52.4	24.3	44.8	28.5	31.0
Slight disadvantage	21.0	22.0	17.5	17.2	21.4	14.3	31.3	20.7	24.0	19.0
Great disadvantage	3.8	4.0	2.1	1.9	4.8	7.1	4.9	3.4	6.7	4.8
HIRING GRADUATES:										
HAVE YOU EVER HIRED GRADUATES	(1148)	(107)	(152)	(337)	(46)	(44)	(152)	(63)	(199)	(48)
Yes	61.0	51.4	84.9	69.7	47.8	36.4	40.1	39.7	63.8	62.5
No	25.8	29.0	9.2	16.3	39.1	52.3	44.1	31.7	28.6	22.9
I don't know	13.2	19.6	5.9	13.9	13.0	11.4	15.8	28.6	7.5	14.6

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
HOW MANY VOCATIONAL GRADUATES HIRED IN LAST TWO YEARS	(303)	(22)	(60)	(125)	(6)	(4)	(23)	(15)	(41)	(7)
1-5	68.6	86.4	70.0	58.4	66.7	75.0	87.0	80.0	70.7	85.7
6-10	19.1	9.1	18.3	26.4	16.7	25.0	13.0	0	14.6	14.3
11-20	7.3	0	6.7	8.8	16.7	0	0	20.0	7.3	0
More than 20	5.0	4.5	5.0	6.4	0	0	0	0	7.3	0
IF NONE HIRED, WHY	(570)	(64)	(52)	(148)	(25)	(29)	(98)	(33)	(97)	(24)
No demand	37.9	29.7	48.1	35.8	56.0	34.5	37.8	33.3	36.1	50.0
None applied	45.1	53.1	32.7	41.2	40.0	55.2	52.0	57.6	45.4	20.8
Lacking skills	4.9	4.7	9.6	10.1	0	0	1.0	3.0	3.1	0
Poor interview	.9	0	0	1.4	0	0	0	0	3.1	0
Poor attitudes	.4	1.6	0	.7	0	0	0	0	0	0
Other	10.9	10.9	9.6	10.8	4.0	10.3	9.2	6.1	12.4	29.2
HOW MANY TECHNICAL GRADUATES HIRED IN LAST TWO YEARS	(414)	(32)	(80)	(132)	(17)	(9)	(33)	(16)	(76)	(19)
1-5	72.9	78.1	61.2	74.2	76.5	77.8	81.8	75.0	72.4	84.2
6-10	12.6	18.8	20.0	14.4	11.8	11.1	6.1	6.3	6.6	0
11-20	8.5	3.1	10.0	6.8	11.8	0	3.0	6.3	14.5	10.5
More than 20	6.0	0	8.8	4.5	0	11.1	9.1	12.5	6.6	5.3

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
IF NONE HIRED, WHY	(568)	(64)	(54)	(142)	(27)	(28)	(96)	(35)	(102)	(20)
No demand	39.1	28.1	50.0	38.0	51.9	35.7	43.8	34.3	36.3	40.0
None applied	44.4	57.8	37.0	41.5	40.7	53.6	46.9	51.4	43.1	15.0
Lacking skills	4.9	4.7	5.6	9.2	3.7	0	1.0	5.7	4.9	0
Poor interview	.5	0	0	.7	0	0	0	0	2.0	0
Poor attitudes	.2	0	0	0	0	0	0	0	1.0	0
Other	10.9	9.4	7.4	10.6	3.7	10.7	8.3	8.6	12.7	45.0
HOW DID VOCATIONAL GRADUATES MAKE CONTACT	(315)	(23)	(65)	(130)	(7)	(3)	(21)	(16)	(41)	(9)
School counselor	18.4	4.3	13.8	20.0	42.9	0	28.6	18.8	17.1	33.3
An instructor	15.6	21.7	18.5	16.9	0	33.3	19.0	6.3	7.3	11.1
School placement	8.6	8.7	12.3	8.5	0	0	9.5	0	9.8	0
Other placement	5.7	4.3	9.2	.8	14.3	0	0	12.5	12.2	22.2
Personal contact	15.9	17.4	12.3	14.6	28.6	0	9.5	37.5	17.1	22.2
Pupil initiative	23.5	26.1	18.5	24.6	14.3	66.7	28.6	25.0	24.4	11.1
Company initiative	7.6	4.3	10.8	10.0	0	0	0	0	7.3	0
I don't know	4.8	13.0	4.6	4.6	0	0	4.8	0	4.9	0
HOW DID TECHNICAL GRADUATES MAKE CONTACT	(421)	(32)	(85)	(135)	(16)	(8)	(31)	(17)	(80)	(17)
School counselor	8.8	6.3	9.4	10.4	0	12.5	6.5	23.5	7.5	0
An instructor	17.1	28.1	21.2	15.6	31.3	0	19.4	5.9	13.7	5.9

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
HOW DID TECHNICAL GRADUATES MAKE CONTACT (continued)										
School placement	12.4	9.4	15.3	14.8	0	12.5	6.5	17.6	12.5	0
Other placement	7.4	0	7.1	5.2	12.5	25.0	3.2	17.6	6.3	29.4
Personal contact	17.6	21.9	17.6	11.9	31.3	12.5	25.8	17.6	18.8	23.5
Pupil initiative	22.3	18.8	14.1	30.4	12.5	25.0	16.1	11.8	23.8	29.4
Company initiative	10.7	12.5	11.8	8.1	6.3	12.5	19.4	5.9	12.5	5.9
I don't know	3.8	3.1	3.5	3.7	6.3	0	3.2	0	5.0	5.9
ABILITY OF GRADUATES:										
WHAT PERCENT OF VOCATIONAL PEOPLE PLACED AS TRAINED	(231)	(17)	(48)	(92)	(4)	(3)	(15)	(14)	(32)	(6)
1-25	26.0	35.3	27.1	25.0	50.0	0	58.3	21.4	12.5	16.7
26-50	16.0	5.9	10.4	25.0	0	0	0	21.4	12.5	16.7
51-75	6.9	0	10.4	7.6	25.0	0	13.3	0	3.1	0
More than 75	51.1	58.8	52.1	42.4	25.0	100.0	33.3	57.1	71.9	66.7

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
WHAT PERCENT OF TECHNICAL PEOPLE PLACED AS TRAINED	(345)	(26)	(74)	(103)	(14)	(6)	(24)	(15)	(67)	(16)
1-25	28.1	50.0	25.7	28.2	28.6	33.3	20.8	13.3	29.9	18.8
26-50	9.3	0	6.8	12.6	7.1	0	12.5	26.7	4.5	18.8
51-75	6.1	0	4.1	8.7	0	0	8.3	0	9.0	6.3
More than 75	56.5	50.0	63.5	50.5	64.3	66.7	58.3	60.0	56.7	56.3
HOW ARE VOCATIONAL PEOPLE PREPARED IN SKILLS	(289)	(20)	(62)	(118)	(5)	(3)	(18)	(15)	(38)	(10)
Very well	13.8	20.0	16.1	7.6	0	33.3	11.1	13.3	21.1	40.0
Well	38.1	35.0	30.6	42.4	60.0	0	50.0	33.3	36.8	30.0
Average	40.8	35.0	46.8	42.4	40.0	66.7	38.9	40.0	31.6	30.0
Poorly	6.2	5.0	4.8	7.6	0	0	0	13.3	7.9	0
Very poorly	1.0	5.0	1.6	0	0	0	0	0	2.6	0
HOW ARE TECHNICAL PEOPLE PREPARED IN SKILLS	(407)	(27)	(85)	(130)	(15)	(7)	(29)	(15)	(80)	(19)
Very well	28.3	29.6	29.4	23.8	40.0	28.6	27.6	13.3	35.0	26.3
Well	38.3	29.6	41.2	44.4	40.0	28.6	20.7	60.0	28.8	47.4
Average	28.5	22.2	27.1	28.5	20.0	42.9	44.8	26.7	28.8	21.1
Poorly	3.4	7.4	2.4	2.3	0	0	3.4	0	6.3	5.3
Very poorly	1.5	11.1	0	.8	0	0	3.4	0	1.2	0

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
HOW DO YOU RATE VOCATIONAL GRADUATES' WORK HABITS	(301)	(21)	(62)	(126)	(6)	(3)	(19)	(15)	(39)	(10)
Very good	13.0	23.8	14.5	9.5	33.3	33.3	5.3	6.7	12.8	30.0
Good	42.5	38.1	30.6	43.7	33.3	33.3	78.9	40.0	46.2	40.0
Average	39.2	33.3	50.0	38.9	33.3	33.3	15.8	53.3	35.9	30.0
Poor	5.0	4.8	4.8	7.1	0	0	0	0	5.1	0
Very poor	.3	0	0	.8	0	0	0	0	0	0
HOW DO YOU RATE TECHNICAL GRADUATES' WORK HABITS	(414)	(27)	(84)	(133)	(16)	(8)	(30)	(17)	(80)	(19)
Very good	23.9	22.2	22.6	21.1	25.0	25.0	30.0	29.4	25.0	31.6
Good	44.4	44.4	42.9	51.1	43.8	50.0	43.3	35.3	36.2	42.1
Average	27.5	22.2	32.1	24.8	25.0	25.0	20.0	35.3	32.5	21.1
Poor	3.4	7.4	2.4	2.3	6.3	0	3.3	0	5.0	5.3
Very poor	1.0	3.7	0	.8	0	0	3.3	0	1.2	0

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
HOW DO YOU RATE VOCATIONAL GRADUATES' ATTITUDES TOWARD WORK	(301)	(20)	(61)	(127)	(6)	(3)	(19)	(16)	(39)	(10)
Very good	14.0	10.0	11.5	10.2	50.0	33.3	21.1	12.5	12.8	50.0
Good	43.9	50.0	41.0	41.7	16.7	0	57.9	43.8	59.0	20.0
Average	37.9	35.0	41.0	44.1	33.3	33.3	21.1	43.8	23.1	30.0
Poor	4.3	5.0	6.6	3.9	0	33.3	0	0	5.1	0
Very poor	0	0	0	0	0	0	0	0	0	0
HOW DO YOU RATE TECHNICAL GRADUATES' ATTITUDES TOWARD WORK	(417)	(28)	(83)	(135)	(16)	(8)	(30)	(17)	(81)	(19)
Very good	22.3	21.4	19.3	18.5	31.3	0	30.0	29.4	23.5	42.1
Good	48.7	42.9	55.4	55.6	31.3	62.5	46.7	35.3	42.0	31.6
Average	25.4	32.1	21.7	23.0	37.5	37.5	20.0	29.4	29.6	21.1
Poor	2.6	3.6	3.6	1.5	0	0	0	5.9	3.7	5.3
Very poor	1.0	0	0	1.5	0	0	3.3	0	1.2	0

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
HOW DO YOU RATE ATTENDANCE RECORD OF VOCATIONAL GRADUATES	(301)	(20)	(61)	(126)	(6)	(3)	(19)	(16)	(40)	(10)
Excellent	12.6	20.0	9.8	7.9	16.7	0	26.3	12.5	12.5	50.0
Good	49.8	60.0	45.9	51.6	66.7	33.3	47.4	31.3	57.5	30.0
Average	33.9	20.0	36.1	36.5	16.7	66.7	26.3	56.3	27.5	20.0
Poor	3.7	0	8.2	4.0	0	0	0	0	2.5	0
Very poor	0	0	0	0	0	0	0	0	0	0
HOW DO YOU RATE ATTENDANCE RECORD OF TECHNICAL GRADUATES	(416)	(28)	(83)	(134)	(16)	(8)	(30)	(17)	(80)	(20)
Excellent	26.2	28.6	20.5	25.4	31.3	12.5	36.7	17.6	26.2	45.0
Good	48.1	46.4	55.4	50.0	43.8	50.0	40.0	35.3	47.5	35.0
Average	24.3	21.4	24.1	22.4	25.0	37.5	23.3	41.2	26.2	15.0
Poor	1.2	3.6	0	1.5	0	0	0	5.9	0	5.0
Very poor	.2	0	0	.7	0	0	0	0	0	0

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
STRENGTHS AND WEAKNESSES:										
WHAT DO YOU PERCEIVE TO BE PRIMARY STRENGTH OF VOCATIONAL PROGRAMS IN SOUTH CAROLINA	(144)	(14)	(23)	(48)	(6)	(3)	(16)	(6)	(18)	(10)
Good teaching	26.4	14.3	39.1	27.1	66.7	33.3	18.8	0	22.2	20.0
Low cost	4.9	14.3	0	2.1	0	0	12.5	16.7	5.6	0
Accessible	11.1	7.1	4.3	14.6	0	0	6.3	0	27.8	10.0
Curriculum variety	13.9	0	4.3	20.8	0	66.7	18.8	16.7	16.7	0
Responsive to business and industry	32.6	42.9	43.5	29.2	16.7	0	31.3	33.3	22.2	50.0
Good facilities	1.4	0	0	0	0	0	6.3	0	0	10.0
Job placement	1.4	0	4.3	2.1	0	0	0	0	0	0
Other	8.3	21.4	4.3	4.2	16.7	0	6.3	33.3	5.6	10.0
WHAT IS ANOTHER STRENGTH	(151)	(8)	(30)	(50)	(4)	(2)	(4)	(9)	(41)	(3)
Good teaching	6.0	0	0	4.0	0	0	25.0	33.3	7.3	0
Low cost	1.3	0	3.3	0	0	0	0	0	2.4	0
Accessible	13.2	25.0	6.7	14.0	0	0	0	11.1	19.5	0
Curriculum variety	20.5	50.0	13.3	24.0	0	0	0	33.3	17.1	33.3
Responsive to business and industry	38.4	0	56.7	32.0	100.0	50.0	50.0	22.2	39.0	0

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
WHAT IS ANOTHER STRENGTH (continued)										
Good facilities	3.3	0	6.7	4.0	0	0	0	0	2.4	0
Job placement	2.0	0	0	2.0	0	0	0	0	2.4	33.3
Other	15.2	25.0	13.3	20.0	0	50.0	25.0	0	9.8	33.3
WHAT DO YOU PERCEIVE TO BE PRIMARY WEAKNESS OF VOCATIONAL PROGRAMS IN SOUTH CAROLINA	(209)	(18)	(41)	(75)	(5)	(3)	(13)	(10)	(36)	(8)
Poor teaching	8.6	5.6	7.3	10.7	0	0	7.7	0	11.1	12.5
Poor job preparation	22.0	38.9	22.0	18.7	60.0	33.3	23.1	0	25.0	0
Not responsive	6.7	5.6	4.9	10.7	0	0	0	20.0	2.8	0
Course offerings	9.6	5.6	19.5	9.3	0	33.3	0	10.0	5.6	0
Poor image	8.6	11.1	7.3	10.7	0	0	7.7	10.0	8.3	0
Lack facilities	2.4	0	4.9	0	0	0	15.4	0	0	12.5
Poor counseling	7.7	0	2.4	16.0	0	0	7.7	0	5.6	0
Lack of variety	1.0	0	0	2.7	0	0	0	0	0	0
Lack funding	.5	0	0	1.3	0	0	0	0	0	0
Not four-year degree	1.0	0	0	0	0	0	0	0	5.6	0
Articulation	1.9	0	0	2.7	0	33.3	0	0	0	12.5
Unfair advantage	1.4	0	0	0	20.0	0	7.7	0	2.8	0
Other	28.7	33.3	31.7	17.3	20.0	0	30.8	60.0	33.3	62.5

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
WHAT IS ANOTHER WEAKNESS	(44)	(1)	(5)	(20)	(1)	(1)	(6)	(1)	(9)	(0)
Poor teaching	9.1	0	20.0	0	0	100.0	16.7	0	11.1	0
Poor job preparation	20.5	100.0	0	25.0	100.0	0	16.7	0	11.1	0
Not responsive	6.8	0	0	5.0	0	0	0	0	22.2	0
Course offerings	13.6	0	0	15.0	0	0	16.7	100.0	11.1	0
Poor image	9.1	0	40.0	10.0	0	0	0	0	0	0
Lack facilities	2.3	0	0	5.0	0	0	0	0	0	0
Poor counseling	11.4	0	20.0	15.0	0	0	16.7	0	0	0
Lack funding	2.3	0	0	0	0	0	16.7	0	0	0
Other	25.0	0	20.0	25.0	0	0	16.7	0	44.4	0
WHAT DO YOU PERCEIVE TO BE PRIMARY STRENGTH OF TECHNICAL PROGRAMS IN SOUTH CAROLINA	(156)	(16)	(34)	(48)	(5)	(2)	(14)	(5)	(19)	(13)
Good teaching	23.1	31.3	29.4	25.0	20.0	0	14.3	0	26.3	7.7
Low cost	6.4	12.5	2.9	6.3	0	50.0	7.1	0	10.5	0
Accessible	11.5	6.3	8.8	8.3	20.0	0	7.1	0	26.3	23.1
Curriculum variety	12.2	6.3	8.8	14.6	0	0	0	40.0	21.1	15.4
Responsive to business and industry	34.0	25.0	41.2	33.3	40.0	0	64.3	40.0	10.5	30.8
Good facilities	3.2	6.3	2.9	4.2	0	50.0	0	0	0	0
Job placement	2.6	6.3	0	2.1	0	0	0	20.0	0	7.7
Other	7.1	6.3	5.9	6.3	20.0	0	7.1	0	5.3	15.4

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
WHAT IS ANOTHER STRENGTH	(170)	(6)	(41)	(48)	(5)	(3)	(7)	(12)	(45)	(3)
Good teaching	11.2	16.7	7.3	8.3	0	0	28.6	25.0	13.3	0
Low cost	4.1	0	4.9	4.2	0	0	0	0	4.4	33.3
Accessible	12,4	0	7.3	12.5	20.0	0	14.3	8.3	20.0	0
Curriculum variety	17.1	66.7	7.3	20.8	40.0	0	14.3	16.7	13.3	33.3
Responsive to business and industry	39.4	16.7	61.0	35.4	40.0	66.7	14.3	33.3	33.3	0
Good facilities	3.5	0	2.4	2.1	0	0	14.3	0	6.7	0
Job placement	1.8	0	0	2.1	0	0	0	8.3	2.2	0
Other	10.6	0	9.8	14.6	0	33.3	14.3	8.3	6.7	33.3
WHAT DO YOU PERCEIVE TO BE PRIMARY WEAKNESS OF TECHNICAL PROGRAMS IN SOUTH CAROLINA	(195)	(18)	(46)	(62)	(5)	(1)	(12)	(11)	(34)	(6)
Poor teaching	8.2	5.6	8.7	3.2	0	100.0	16.7	0	17.6	0
Poor job preparation	22.1	38.9	26.1	19.4	20.0	0	25.0	9.1	20.6	0
Not responsive	7.2	5.6	2.2	14.5	0	0	0	18.2	2.9	0
Course offerings	9.7	11.1	19.6	8.1	20.0	0	0	0	5.9	0
Poor image	6.2	0	6.5	8.1	0	0	0	9.1	8.8	0
Lack facilities	3.1	0	4.3	4.8	0	0	0	0	2.9	0
Poor counseling	10.3	0	6.5	16.1	20.0	0	25.0	9.1	0	16.7
Lack funding	2.1	5.6	4.3	0	0	0	8.3	0	0	0

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Public Administration	Total Services
WHAT DO YOU PERCEIVE TO BE PRIMARY WEAKNESS OF TECHNICAL PROGRAMS IN SOUTH CAROLINA (continued)										
Not four-year degree	2.1	0	4.3	0	0	0	0	0	5.9	0
Articulation	3.1	0	0	6.5	0	0	0	9.1	0	16.7
Unfair advantage	1.5	0	0	0	20.0	0	8.3	0	2.9	0
Other	24.6	33.3	17.4	19.4	20.0	0	16.7	45.5	29.4	66.7
WHAT IS ANOTHER WEAKNESS	(45)	(1)	(10)	(14)	(1)	(2)	(7)	(1)	(9)	(0)
Poor teaching	8.9	0	10.0	0	0	0	28.6	0	11.1	0
Poor job preparation	22.2	100.0	10.0	21.4	0	0	28.6	0	33.3	0
Not responsive	8.9	0	10.0	7.1	100.0	0	0	0	11.1	0
Course offerings	8.9	0	0	21.4	0	0	14.3	0	0	0
Poor image	6.7	0	20.0	0	0	0	14.3	0	0	0
Lack facilities	2.2	0	10.0	0	0	0	0	0	0	0
Poor counseling	11.1	0	10.0	7.1	0	50.0	0	100.0	11.1	0
Lack funding	2.2	0	0	7.1	0	0	0	0	0	0
Articulation	4.4	0	20.0	0	0	0	0	0	0	0
Unfair advantage	2.2	0	0	0	0	50.0	0	0	0	0
Other	22.2	0	10.0	35.7	0	0	14.3	0	33.3	0

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
HIRING AND TRAINING NEEDS:										
MOST FREQUENT AREA FOR WHICH GRADUATES HIRED	(457)	(34)	(93)	(148)	(14)	(9)	(33)	(19)	(84)	(23)
Office	24.3	8.8	11.8	20.9	42.9	44.4	18.2	89.5	22.6	60.9
Marketing-sales	2.0	0	0	.7	0	0	24.2	0	0	0
Agriculture	1.8	0	0	0	0	0	0	0	3.6	21.7
Mechanics	7.7	2.9	2.2	4.1	28.6	44.4	36.4	0	7.1	0
Media	.2	0	0	.7	0	0	0	0	0	0
Engineering	10.3	23.5	11.8	8.8	7.1	0	6.1	0	14.3	0
Graphic arts	2.6	0	1.1	7.4	0	0	0	0	0	0
Computers	1.8	0	2.2	2.7	0	0	0	5.3	1.2	0
Allied health	6.8	0	0	.7	0	0	0	5.3	33.3	4.3
Electronics	1.8	0	2.2	0	7.1	11.1	3.0	0	3.6	0
Social services	.2	0	0	0	0	0	0	0	1.2	0
Personal services	.2	0	0	0	0	0	0	0	1.2	0
Building trades	4.4	35.3	2.2	1.4	0	0	3.0	0	3.6	0
Hotel-restaurant	1.5	0	0	0	0	0	0	0	6.0	8.7
Industrial trades	21.9	29.4	65.6	14.9	7.1	0	9.1	0	2.4	4.3
Textiles	12.7	0	1.1	37.8	7.1	0	0	0	0	0

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
SECOND MOST FREQUENT AREA	(266)	(15)	(70)	(94)	(5)	(5)	(16)	(12)	(38)	(11)
Office	28.9	33.3	14.3	33.0	0	0	37.5	25.0	47.4	36.4
Marketing-sales	1.9	0	1.4	1.1	0	0	12.5	8.3	0	0
Agriculture	.4	0	0	0	0	0	0	0	0	9.1
Animal sciences	1.1	0	1.4	0	0	0	0	0	0	18.2
Mechanics	5.6	0	2.9	3.2	40.0	0	18.8	8.3	7.9	9.1
Media	.4	0	0	1.1	0	0	0	0	0	0
Engineering	14.7	20.0	31.4	11.7	0	20.0	0	0	5.3	0
Graphic arts	1.1	0	0	2.1	0	0	0	8.3	0	0
Computers	9.8	0	5.7	9.6	20.0	40.0	6.3	41.7	10.5	0
Allied health	1.5	0	0	0	0	0	0	8.3	7.9	0
Electronics	1.9	0	2.9	1.1	20.0	0	6.3	0	0	0
Social services	.8	0	0	0	0	0	0	0	5.3	0
Personal services	.8	0	0	0	0	0	12.5	0	0	0
Building trades	9.0	33.3	14.3	2.1	0	20.0	0	0	7.9	27.3
Hotel-restaurant	.8	0	0	0	0	0	0	0	5.3	0
Industrial trades	14.7	13.3	21.4	19.1	20.0	20.0	6.3	0	2.6	0
Textiles	6.8	0	4.3	16.0	0	0	0	0	0	0
THIRD MOST FREQUENT AREA	(163)	(10)	(43)	(65)	(2)	(2)	(8)	(5)	(21)	(7)
Office	18.4	0	37.2	13.8	0	0	12.5	20.0	14.3	0
Marketing-sales	2.5	0	0	1.5	0	0	12.5	40.0	0	0
Agriculture	.6	0	2.3	0	0	0	0	0	0	0

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
THIRD MOST FREQUENT AREA (continued)										
Mechanics	5.5	10.0	7.0	4.6	0	0	0	0	4.8	14.3
Media	.6	10.0	0	0	0	0	0	0	0	0
Engineering	10.4	10.0	16.3	7.7	0	0	12.5	0	4.8	28.6
Graphic arts	3.1	0	0	4.6	0	0	0	0	4.8	14.3
Computers	13.5	10.0	4.7	16.9	0	0	25.0	40.0	19.0	0
Allied health	.6	0	2.3	0	0	0	0	0	0	0
Electronics	3.1	0	2.3	1.5	0	0	25.0	0	4.8	0
Personal services	.6	0	0	0	0	0	0	0	0	14.3
Building trades	11.0	40.0	9.3	10.8	0	0	0	0	9.5	14.3
Hotel-restaurant	1.8	0	0	0	0	0	0	0	14.3	0
Industrial trades	21.5	20.0	14.0	27.7	100.0	100.0	0	0	19.0	14.3
Textiles	6.7	0	4.7	10.8	0	0	12.5	0	4.8	0
MOST FREQUENT AREA FOR WHICH GRADUATES TRAINED	(445)	(34)	(90)	(143)	(14)	(9)	(30)	(19)	(83)	(23)
Office	24.5	8.8	11.1	22.4	42.9	44.4	20.0	89.5	20.5	60.9
Marketing-sales	1.1	0	0	.7	0	0	13.3	0	0	0
Agriculture	1.8	0	0	0	0	0	0	0	3.6	21.7
Mechanics	7.6	2.9	3.3	4.2	28.6	33.3	40.0	0	6.0	0
Media	.4	0	0	1.4	0	0	0	0	0	0
Engineering	10.8	23.5	12.2	9.1	7.1	0	10.0	0	14.5	0

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
MOST FREQUENT AREA FOR WHICH GRADUATES TRAINED (continued)										
Graphic arts	2.2	0	1.1	6.3	0	0	0	0	0	0
Computers	2.2	0	2.2	2.8	0	0	3.3	5.3	2.4	0
Allied health	7.0	0	0	.7	0	0	0	5.3	33.7	4.3
Electronics	2.2	2.9	2.2	0	14.3	11.1	3.3	0	3.6	0
Social services	.4	0	0	0	0	0	0	0	1.2	4.3
Personal services	.2	0	0	0	0	0	0	0	1.2	0
Building trades	4.7	35.3	0	4.2	0	0	0	0	3.6	0
Hotel-restaurant	1.6	0	0	0	0	0	0	0	7.2	4.3
Industrial trades	21.3	26.5	66.7	13.3	0	11.1	10.0	0	2.4	4.3
Textiles	11.7	0	1.1	35.0	7.1	0	0	0	0	0
SECOND MOST FREQUENT AREA	(260)	(13)	(67)	(98)	(5)	(5)	(14)	(13)	(33)	(12)
Office	28.1	30.8	14.9	30.6	0	0	35.7	23.1	54.5	25.0
Marketing-sales	2.3	0	0	1.0	0	0	14.3	7.7	0	16.7
Animal sciences	1.2	0	1.5	0	0	0	0	0	0	16.7
Mechanics	5.4	0	3.0	2.0	40.0	20.0	14.3	7.7	9.1	8.3
Media	.4	0	0	1.0	0	0	0	0	0	0
Engineering	12.7	23.1	29.9	8.2	0	20.0	0	0	3.0	0
Graphic arts	1.5	0	0	3.1	0	0	0	7.7	0	0
Computers	11.2	0	6.0	12.2	20.0	40.0	7.1	46.2	9.1	0

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
SECOND MOST FREQUENT AREA (continued)										
Allied health	1.2	0	0	0	0	0	0	7.7	6.1	0
Electronics	2.3	0	1.5	2.0	20.0	0	14.3	0	0	0
Social services	.4	0	0	0	0	0	0	0	3.0	0
Personal services	.4	0	0	0	0	0	7.1	0	0	0
Building trades	9.6	30.8	14.9	4.1	0	0	0	0	9.1	33.3
Hotel-restaurant	.4	0	0	0	0	0	0	0	3.0	0
Industrial trades	18.1	15.4	25.4	24.5	20.0	20.0	7.1	0	3.0	0
Textiles	5.0	0	3.0	11.2	0	0	0	0	0	0
THIRD MOST FREQUENT AREA	(151)	(8)	(41)	(64)	(2)	(3)	(6)	(5)	(16)	(6)
Office	19.9	0	34.1	17.2	0	0	16.7	20.0	18.8	0
Marketing-sales	2.6	0	0	1.6	0	0	16.7	40.0	0	0
Mechanics	4.6	12.5	9.8	1.6	0	0	0	0	6.3	0
Engineering	11.9	12.5	17.1	9.4	0	33.3	16.7	0	0	33.3
Graphic arts	2.6	0	0	4.7	0	0	0	0	6.3	0
Computers	11.3	12.5	4.9	12.5	0	0	16.7	40.0	18.8	0
Allied health	.7	0	2.4	0	0	0	0	0	0	0
Electronics	3.3	0	2.4	3.1	0	0	16.7	0	0	16.7
Personal services	1.3	0	0	1.6	0	0	0	0	0	16.7
Building trades	11.3	50.0	9.8	9.4	0	33.3	0	0	6.3	16.7
Hotel-restaurant	1.3	0	0	0	0	0	0	0	12.5	0

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
THIRD MOST FREQUENT AREA (continued)										
Industrial trades	22.5	12.5	12.2	29.7	100.0	33.3	16.7	0	25.0	16.7
Textiles	6.6	0	7.3	9.4	0	0	0	0	6.3	0
WHAT IS MOST DIFFICULT AREA TO EMPLOY FOR	(340)	(26)	(75)	(118)	(7)	(6)	(25)	(14)	(57)	(12)
Office	8.5	7.7	4.0	1.7	28.6	0	8.0	57.1	10.5	33.3
Marketing-sales	5.6	0	1.3	3.4	14.3	16.7	36.0	0	3.5	8.3
Agriculture	1.8	0	0	.8	0	0	0	7.1	3.5	16.7
Animal sciences	1.5	0	0	0	0	0	0	7.1	7.0	0
Mechanics	5.9	0	1.3	3.4	14.3	33.3	20.0	0	12.3	0
Media	.6	0	0	1.7	0	0	0	0	0	0
Engineering	12.9	7.7	25.3	10.2	0	16.7	0	0	14.0	16.7
Graphic arts	3.5	0	1.3	6.8	0	16.7	0	0	3.5	0
Computers	7.1	0	5.3	8.5	14.3	0	8.0	28.6	5.3	0
Allied health	5.0	0	0	0	0	0	4.0	0	24.6	16.7
Electronics	2.4	0	2.7	0	14.3	16.7	8.0	0	1.8	8.3
Social services	.6	3.8	0	0	0	0	0	0	1.8	0
Personal services	1.2	0	0	.8	0	0	8.0	0	1.8	0
Building trades	6.2	57.7	2.7	2.5	0	0	4.0	0	0	0
Hotel-restuarant	.6	0	0	0	0	0	0	0	3.5	0
Industrial trades	23.5	23.1	54.7	22.7	14.3	0	4.0	0	7.0	0
Textiles	13.2	0	1.3	37.3	0	0	0	0	0	0

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
WHAT IS SECOND MOST DIFFICULT	(220)	(12)	(55)	(83)	(3)	(4)	(13)	(11)	(31)	(8)
Office	13.2	8.3	1.8	12.0	0	0	46.2	9.1	25.8	25.0
Marketing-sales	4.1	0	3.6	0	0	25.0	30.8	18.2	0	0
Agriculture	.9	0	0	1.2	0	0	0	0	3.2	0
Animal sciences	2.3	0	0	1.2	0	25.0	0	9.1	3.2	12.5
Mechanics	7.3	25.0	9.1	2.4	33.3	0	15.4	0	9.7	0
Media	1.4	0	0	1.2	0	0	0	0	6.5	0
Engineering	16.8	25.0	25.5	14.5	33.3	0	0	0	19.4	12.5
Graphic arts	1.8	0	0	4.8	0	0	0	0	0	0
Computers	8.2	8.3	3.6	9.6	0	0	7.7	36.4	6.5	0
Allied health	1.4	0	0	1.2	0	0	0	9.1	3.2	0
Electronics	.9	0	1.8	0	33.3	0	0	0	0	0
Social services	.9	0	0	0	0	0	0	0	6.5	0
Personal services	1.4	8.3	0	1.2	0	0	0	9.1	0	0
Building trades	10.5	8.3	18.2	10.8	0	0	0	9.1	6.5	0
Industrial trades	22.7	16.7	36.4	22.9	0	50.0	0	0	9.7	50.0
Textiles	6.4	0	0	16.9	0	0	0	0	0	0
WHAT IS THIRD MOST DIFFICULT	(169)	(9)	(40)	(70)	(1)	(3)	(10)	(7)	(21)	(8)
Office	27.8	22.2	27.5	32.9	0	33.3	20.0	14.3	33.3	0
Marketing-sales	7.1	11.1	5.0	4.3	0	0	30.0	28.6	4.8	0

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
WHAT IS THIRD MOST DIFFICULT (continued)										
Agriculture	2.4	0	5.0	0	0	0	0	14.3	0	12.5
Animal sciences	1.2	0	0	1.4	0	0	0	0	4.8	0
Mechanics	7.1	11.1	0	11.4	0	0	10.0	0	4.8	12.5
Engineering	6.5	22.2	17.5	2.9	0	0	0	0	0	0
Graphic arts	2.4	0	0	1.4	0	0	10.0	14.3	0	12.5
Computers	7.7	11.1	0	8.6	0	33.3	10.0	0	9.5	25.0
Allied health	3.0	0	7.5	0	0	0	0	14.3	4.8	0
Electronics	4.1	0	10.0	1.4	0	0	0	0	4.8	12.5
Social services	1.2	0	0	1.4	0	33.3	0	0	0	0
Personal services	1.2	0	0	0	0	0	0	0	9.5	0
Building trades	7.7	11.1	12.5	5.7	0	0	0	0	4.8	25.0
Hotel-restaurant	4.7	11.1	0	4.3	0	0	10.0	0	14.3	0
Industrial trades	10.1	0	12.5	11.4	100.0	0	10.0	14.3	4.8	0
Textiles	5.9	0	2.5	12.9	0	0	0	0	0	0
WHAT IS EASIEST AREA TO EMPLOY FOR	(324)	(20)	(68)	(116)	(10)	(7)	(20)	(15)	(55)	(13)
Office	59.9	60.0	58.8	59.5	70.0	71.4	60.0	80.0	52.7	61.5
Marketing-sales	1.9	0	1.5	.9	0	0	20.0	0	0	0
Agriculture	1.5	0	1.5	0	0	0	0	0	0	30.8
Mechanics	3.1	5.0	0	1.7	30.0	14.3	10.0	0	1.8	0

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Public Administration	Total Services
WHAT IS EASIEST AREA TO EMPLOY FOR (continued)										
Media	.6	0	0	1.7	0	0	0	0	0	0
Engineering	3.1	10.0	2.9	2.6	0	0	5.0	0	3.6	0
Graphic arts	.6	0	0	1.7	0	0	0	0	0	0
Computers	1.5	0	2.9	0	0	0	0	13.3	1.8	0
Allied health	4.0	0	0	1.7	0	0	0	6.7	18.2	0
Social services	.6	5.0	0	.9	0	0	0	0	0	0
Personal services	.9	0	0	.9	0	0	0	0	3.6	0
Building trades	3.1	10.0	0	2.6	0	0	5.0	0	7.3	0
Hotel-restaurant	2.2	0	0	.9	0	0	0	0	9.1	7.7
Industrial trades	7.7	10.0	25.0	3.4	0	14.3	0	0	1.8	0
Textiles	9.3	0	7.4	21.6	0	0	0	0	0	0
WHAT IS SECOND EASIEST	(169)	(6)	(35)	(62)	(5)	(3)	(8)	(8)	(36)	(6)
Office	18.3	0	11.4	14.5	20.0	0	12.5	37.5	30.6	33.3
Marketing-sales	5.9	0	8.6	0	0	33.3	25.0	25.0	5.6	0
Agriculture	1.2	0	0	1.6	0	0	0	0	0	16.7
Animal sciences	.6	0	0	0	0	0	0	0	0	16.7
Mechanics	11.2	33.3	8.6	6.5	40.0	33.3	25.0	12.5	11.1	0
Engineering	8.3	33.3	11.4	8.1	0	0	0	0	8.3	0
Graphic arts	1.8	0	0	3.2	0	0	12.5	0	0	0
Computers	18.3	0	22.9	30.6	0	0	0	12.5	8.3	0

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
WHAT IS SECOND EASIEST (continued)										
Allied Health	4.1	0	2.9	1.6	0	0	0	12.5	11.1	0
Electronics	.6	0	0	1.6	0	0	0	0	0	0
Social services	1.2	0	0	1.6	0	0	0	0	2.8	0
Personal services	3.0	16.7	0	0	0	0	0	0	8.3	16.7
Building trades	7.1	0	14.3	6.5	0	0	12.5	0	2.8	16.7
Hotel restaurant	1.8	0	0	1.6	0	0	0	0	5.6	0
Industrial trades	13.6	16.7	14.3	19.4	20.0	33.3	12.5	0	5.6	0
Textiles	3.0	0	5.7	3.2	20.0	0	0	0	0	0
WHAT IS THIRD EASIEST	(119)	(4)	(25)	(48)	(3)	(3)	(7)	(3)	(21)	(5)
Office	8.4	25.0	16.0	6.3	33.3	0	0	0	4.8	0
Marketing-sales	9.2	0	12.0	8.3	33.3	0	28.6	33.3	0	0
Agriculture	.8	0	0	0	0	0	0	0	4.8	0
Mechanics	5.9	0	8.0	8.3	0	0	0	0	4.8	0
Media	.8	0	0	2.1	0	0	0	0	0	0
Engineering	10.1	0	20.0	4.2	0	33.3	0	0	9.5	40.0
Graphic arts	2.5	25.0	4.0	0	0	0	0	0	0	20.0
Computers	13.4	0	8.0	14.6	0	0	28.6	33.3	14.3	20.0
Allied health	3.4	0	4.0	2.1	0	0	0	0	9.5	0
Electronics	3.4	0	4.0	0	33.3	33.3	14.3	0	0	0
Social services	.8	0	0	0	0	0	0	0	4.8	0

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
WHAT IS THIRD EASIEST (continued)										
Personal services	3.0	16.7	0	0	0	0	0	0	8.3	16.7
Building trades	7.1	0	14.3	6.5	0	0	12.5	0	2.8	16.7
Hotel-restaurant	1.8	0	0	1.6	0	0	0	0	5.6	0
Industrial trades	13.6	16.7	14.3	19.4	20.0	33.3	12.5	0	5.6	0
Textiles	3.0	0	5.7	3.2	20.0	0	0	0	0	0
IN WHAT AREAS ARE FUTURE NEEDS	(119)	(4)	(25)	(48)	(3)	(3)	(7)	(3)	(21)	(5)
Office	8.4	25.0	16.0	6.3	33.3	0	0	0	4.8	0
Marketing-sales	9.2	0	12.0	8.3	33.3	0	28.6	33.3	0	0
Agriculture	.8	0	0	0	0	0	0	0	4.8	0
Mechanics	5.9	0	8.0	8.3	0	0	0	0	4.8	0
Media	.8	0	0	2.1	0	0	0	0	0	0
Engineering	10.1	0	20.0	4.2	0	33.3	0	0	9.5	40.0
Graphic arts	2.5	25.0	4.0	0	0	0	0	0	0	20.0
Computers	13.4	0	8.0	14.6	0	0	28.6	33.3	14.3	20.0
Allied health	3.4	0	4.0	2.1	0	0	0	0	9.5	0
Electronics	3.4	0	4.0	0	33.3	33.3	14.3	0	0	0
Social services	.8	0	0	0	0	0	0	0	4.8	0
Personal services	2.5	0	0	2.1	0	0	14.3	0	4.8	0
Building trades	7.6	25.0	8.0	4.2	0	33.3	14.3	33.3	4.8	0

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
IN WHAT AREAS ARE FUTURE NEEDS (continued)										
Hotel-restaurant	1.2	0	0	0	0	0	0	0	5.0	4.5
Industrial trades	22.9	29.4	65.9	18.3	0	12.5	7.1	0	2.5	0
Textiles	17.4	0	6.8	47.9	8.3	0	0	0	0	0
WHAT IS SECOND AREA	(313)	(21)	(74)	(106)	(9)	(5)	(16)	(13)	(56)	(13)
Office	24.6	28.6	10.8	20.8	44.4	60.0	31.3	23.1	37.5	38.5
Marketing-sales	4.5	0	4.1	1.9	22.2	0	12.5	23.1	3.6	0
Agriculture	.6	0	1.4	0	0	0	0	0	0	7.7
Animal sciences	.6	0	0	0	0	0	0	0	0	15.4
Mechanics	7.0	9.5	8.1	4.7	11.1	0	31.3	0	5.4	0
Media	.3	0	0	0	0	0	0	0	1.8	0
Engineering	16.6	28.6	33.8	13.2	0	20.0	12.5	0	7.1	0
Graphic arts	1.0	0	0	1.9	0	0	0	7.7	0	0
Computers	9.9	0	6.8	11.3	11.1	0	0	30.8	16.1	0
Allied health	1.6	0	0	0	0	0	0	7.7	7.1	0
Electronics	1.9	0	4.1	0	0	20.0	6.3	0	1.8	0
Personal services	.3	0	0	0	0	0	0	0	1.8	0
Building trades	7.7	23.8	5.4	8.5	0	0	0	7.7	5.4	15.4
Hotel-restaurant	1.6	0	0	0	0	0	0	0	8.9	0
Industrial trades	16.6	9.5	21.6	25.5	11.1	0	6.3	0	3.6	23.1
Textiles	5.1	0	4.1	12.3	0	0	0	0	0	0

Questionnaire Items	All Respondents	Construction	Manufacturing, Durable Goods	Manufacturing, Nondurable Goods	Transportation	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Total Services	Public Administration
WHAT IS THIRD AREA	(223)	(15)	(56)	(91)	(4)	(5)	(11)	(5)	(25)	(11)
Office	33.6	33.3	35.7	39.6	0	20.0	18.2	20.0	32.0	18.2
Marketing-sales	4.9	6.7	7.1	3.3	0	0	9.1	40.0	0	0
Agriculture	.4	0	0	0	0	0	0	0	4.0	0
Mechanics	5.4	20.0	5.4	4.4	0	0	9.1	0	4.0	0
Media	.4	0	0	1.1	0	0	0	0	0	0
Engineering	9.9	0	10.7	9.9	25.0	20.0	9.1	0	4.0	27.3
Graphic arts	1.8	0	0	2.2	0	0	0	0	4.0	9.1
Computers	11.2	13.3	8.9	11.0	0	20.0	18.2	40.0	8.0	9.1
Allied health	1.3	0	0	0	0	0	0	0	12.0	0
Electronics	.9	0	1.8	0	0	0	9.1	0	0	0
Personal services	.4	0	0	0	0	0	9.1	0	0	0
Building trades	9.4	20.0	14.3	5.5	0	0	0	0	16.0	9.1
Hotel-restaurant	.4	0	0	0	0	0	9.1	0	0	0
Industrial trades	17.0	6.7	16.1	17.6	75.0	40.0	9.1	0	12.0	27.3
Textiles	2.7	0	0	5.5	0	0	0	0	4.0	0

Public Interview: Responses Crosstabulated by Geographic Region, Reported in Percentages*

Questionnaire Items	All Respondents	Geographic Region			
		Piedmont	Pee-Dee	Midlands	Low Country
DEMOGRAPHIC DATA:					
WHAT IS YOUR ETHNIC BACKGROUND	(603)	(163)	(98)	(218)	(124)
White	68.8	68.7	70.4	72.5	61.3
Black	29.4	31.3	25.5	26.6	34.7
Other	1.8	0	4.1	.9	4.0
WHAT IS YOUR SEX	(611)	(166)	(97)	(221)	(127)
Male	33.6	27.7	29.9	36.2	39.4
Female	66.4	72.3	70.1	63.8	60.6
AGE	(609)	(165)	(98)	(219)	(127)
18-20	3.6	1.8	4.1	3.7	5.5
21-34	36.5	30.9	39.8	40.6	33.9
35-59	44.0	52.1	37.8	39.3	46.5
60 or over	15.9	15.2	18.4	16.4	14.2
CHILDREN BETWEEN 15 AND 24	(433)	(127)	(55)	(169)	(82)
No	60.7	53.5	60.0	70.4	52.4
Yes	39.3	46.5	40.0	29.6	47.6
IF YES, HOW MANY	(170)	(59)	(22)	(50)	(39)
1	44.7	44.1	59.1	48.0	33.3
2	32.9	32.2	31.8	36.8	30.8
3	12.9	13.6	0	8.0	25.6
More than 3	9.4	10.2	9.1	8.0	10.3

* Number of respondents shown in parentheses.

Questionnaire Items	All Respondents	Geographic Region			
		Piedmont	Pee-Dee	Midlands	Low Country
HIGHEST GRADE OF SCHOOL	(610)	(164)	(98)	(221)	(127)
2-6	5.7	2.4	9.2	5.9	7.1
7-11	29.0	30.5	30.6	28.5	26.8
12	32.8	31.7	32.7	31.2	37.0
13-16	28.4	32.9	25.5	27.6	26.0
17-24	4.1	2.4	2.0	6.8	3.1
EMPLOYMENT DATA:					
ARE YOU EMPLOYED	(602)	(162)	(97)	(218)	(125)
Yes	58.8	53.1	52.6	65.6	59.2
No	41.2	46.9	47.4	34.4	40.8
IF YES	(342)	(85)	(50)	(136)	(71)
Full time	87.4	83.5	90.0	86.0	93.0
Part time	12.6	16.5	10.0	14.0	7.0
WHAT KIND OF WORK DO YOU DO	(339)	(83)	(48)	(135)	(73)
Office	13.6	13.3	8.3	14.8	15.1
Marketing-sales	8.0	12.0	4.2	8.1	5.5
Agriculture	1.5	0	0	2.2	2.7
Animal sciences	.9	1.2	0	.7	1.4
Mechanics	2.7	3.6	4.2	2.2	1.4
Media	1.8	1.2	2.1	2.2	1.4
Engineering	2.4	3.6	0	1.5	4.1
Graphic arts	.3	0	0	0	1.4
Computers	.3	0	0	.7	0
Allied health	6.5	4.8	12.5	5.2	6.8
Electronics	1.5	2.4	0	2.2	0
Social services	2.1	1.2	4.2	1.5	2.7
Personal services	2.4	3.6	4.2	1.5	1.4
Building trades	8.0	7.2	10.4	6.7	9.6

Questionnaire Items	All Respondents	Geographic Region			
		Piedmont	Pee-Dee	Midlands	Low Country
WHAT KIND OF WORK DO YOU DO (continued)					
Hotel-restaurant	5.6	4.8	12.5	3.7	5.5
Industrial trades	9.7	9.6	12.5	10.4	6.8
Textiles	12.4	18.1	8.3	13.3	6.8
Professional	3.5	0	6.3	4.4	4.1
Trucking	2.1	3.6	0	.7	4.1
Administration-management	5.3	4.8	2.1	6.7	5.5
Domestic service	4.4	3.6	2.1	5.2	5.5
Military-government	5.0	1.2	6.3	5.2	8.2
Housekeeping	.3	0	0	.7	0
IF NOT WORKING	(246)	(75)	(46)	(74)	(51)
Retired	29.7	28.0	32.6	36.5	19.6
Keeping house	50.8	52.0	58.7	41.9	54.9
Unemployed	19.5	20.0	8.7	21.6	25.5
IF UNEMPLOYED, SEEKING A JOB	(70)	(25)	(5)	(24)	(16)
Yes	52.9	48.0	40.0	58.3	56.3
No	47.1	52.0	60.0	41.7	43.8
IF UNEMPLOYED, WHAT ARE YOU TRAINED FOR	(61)	(20)	(6)	(19)	(16)
Office	18.0	30.0	0	10.5	18.8
Marketing-sales	3.3	0	33.3	0	0
Agriculture	1.6	0	0	0	6.3
Media	1.6	0	0	5.3	0
Engineering	3.3	5.0	0	5.3	0
Graphic arts	3.3	0	0	10.5	0

Questionnaire Items	All Respondents	Geographic Region			
		Piedmont	Pee-Dee	Midlands	Low Country
IF UNEMPLOYED, WHAT ARE YOU TRAINED FOR (continued)					
Allied health	13.1	5.0	0	10.5	31.3
Social services	4.9	0	0	10.5	6.3
Building trades	9.8	10.0	16.7	5.3	12.5
Hotel-restaurant	4.9	5.0	0	0	12.5
Industrial trades	3.3	0	0	10.5	0
Textiles	16.4	20.0	16.7	21.1	6.3
Professional	1.6	5.0	0	0	0
Trucking	1.6	0	0	5.3	0
Domestic service	4.9	5.0	33.3	0	0
Housekeeping	8.2	15.0	0	5.3	6.3
DO YOU NEED MORE SKILLS FOR YOUR WORK	(542)	(147)	(85)	(195)	(115)
Yes	33.0	29.9	42.4	34.9	27.0
No	67.0	70.1	57.6	65.1	73.0
WOULD YOU TAKE COURSES TO IMPROVE SKILLS	(539)	(147)	(83)	(195)	(114)
No	33.8	40.8	32.5	30.3	31.6
Yes	66.2	59.2	67.5	69.7	68.4
IF YES, WHAT SKILLS WOULD BE BENEFICIAL	(295)	(68)	(51)	(106)	(70)
Office	25.1	30.9	25.5	20.8	25.7
Marketing-sales	7.8	7.4	3.9	10.4	7.1
Agriculture	.7	0	2.0	0	1.4
Mechanics	3.7	1.5	3.9	3.8	5.7
Media	.7	0	0	1.9	0

Questionnaire Items	All Respondents	Geographic Region			
		Piedmont	Pee-Dee	Midlands	Low Country
IF YES, WHAT SKILLS WOULD BE BENEFICIAL (continued)					
Engineering	5.1	4.4	3.9	6.6	4.3
Graphic arts	.7	1.5	2.0	0	0
Computers	4.1	5.9	2.0	5.7	1.4
Allied health	11.5	13.2	13.7	10.4	10.0
Electronics	4.4	2.9	7.8	2.8	5.7
Social services	2.7	1.5	5.9	0	5.7
Personal services	2.4	4.4	2.0	.9	2.9
Building trades	3.1	4.4	0	3.8	2.9
Hotel-restaurant	1.4	1.5	2.0	.9	1.4
Industrial trades	7.1	5.9	7.8	6.6	8.6
Textiles	3.4	2.9	5.9	.9	5.7
Professional	4.7	2.9	0	7.5	5.7
Administration-management	9.5	7.4	7.8	15.1	4.3
Military-government	1.0	0	2.0	.9	1.4
Housekeeping	1.0	1.5	2.0	.9	0
WHAT OTHER SKILLS WOULD BE BENEFICIAL	(70)	(9)	(12)	(27)	(22)
Office	10.0	0	16.7	11.1	9.1
Marketing-sales	4.3	11.1	8.3	0	4.5
Mechanics	8.6	11.1	8.3	11.1	4.5
Media	4.3	0	0	11.1	0
Engineering	4.3	0	0	11.1	0
Computers	1.4	0	0	3.7	0
Allied health	4.3	0	0	3.7	9.1
Electronics	5.7	11.1	8.3	3.7	4.5
Social services	2.9	0	0	0	9.1
Personal services	5.7	11.1	16.7	0	4.5
Building trades	8.6	0	8.3	3.7	18.2
Hotel-restaurant	2.9	0	8.3	0	4.5
Industrial trades	8.6	22.2	0	11.1	4.5

Questionnaire Items	All Respondents	Geographic Region			
		Piedmont	Pee-Dee	Midlands	Low Country
WHAT OTHER SKILLS WOULD BE BENEFICIAL (continued)					
Textiles	4.3	0	8.3	3.7	4.5
Professional	11.4	22.2	8.3	7.4	13.6
Administration-management	10.0	0	0	18.5	9.1
Domestic service	1.4	0	8.3	0	0
Housekeeping	1.4	11.1	0	0	0
HAVE YOU TAKEN COURSES TO UPGRADE SKILLS SINCE YOU LEFT SCHOOL	(531)	(144)	(83)	(190)	(114)
Yes	36.0	35.4	28.9	38.9	36.8
No	64.0	64.6	71.1	61.1	63.2
KNOWLEDGE OF VOCATIONAL/TECHNICAL PROGRAMS:					
ARE YOU FAMILIAR WITH VOCATIONAL/TECHNICAL PROGRAMS	(608)	(163)	(96)	(222)	(127)
Very familiar	10.9	15.3	7.3	8.1	12.6
Fairly familiar	28.9	28.8	27.1	29.3	29.9
Not too familiar	45.1	41.7	50.0	43.7	48.0
Not familiar at all	15.1	14.1	15.6	18.9	9.4

Questionnaire Items	All Respondents	Geographic Region			
		Piedmont	Pee-Dee	Midlands	Low Country
HOW DID YOU LEARN ABOUT THESE PROGRAMS	(242)	(72)	(31)	(85)	(54)
Publications	11.2	11.1	0	16.5	9.3
Newspapers	16.1	19.4	12.9	10.6	22.2
Through enrollment	25.2	13.9	41.9	27.1	27.8
Counselor	2.1	1.4	3.2	2.4	1.9
Enrollment of a family member	22.3	29.2	22.6	18.8	18.5
Other	23.1	25.0	19.4	24.7	20.4
IF OTHER, HOW ELSE	(59)	(20)	(7)	(23)	(9)
Live near a center	22.0	20.0	28.6	30.4	0
Consulting	11.9	10.0	0	8.7	33.3
From friends	33.9	30.0	28.6	30.4	55.6
Television publicity	6.8	10.0	14.3	4.3	0
Military	5.1	10.0	0	0	11.1
School representatives	20.3	20.0	28.6	26.1	0
COUNSELING:					
HAS A COUNSELOR EVER RECOMMENDED THESE PROGRAMS	(243)	(72)	(32)	(85)	(54)
No	78.2	68.1	93.8	80.0	79.6
Yes, to me	8.6	6.9	3.1	11.8	9.3
Yes, to family member	12.3	25.0	3.1	7.1	11.1
Yes, to both	.4	0	0	1.2	0

Questionnaire Items	All Respondents	Geographic Region			
		Piedmont	Pee-Dee	Midlands	Low Country
HOW WAS THE ADVICE GIVEN	(55)	(23)	(2)	(19)	(11)
Useful	89.1	100.0	0	78.9	100.0
Not useful	9.1	0	50.0	21.1	0
Misleading	1.8	0	50.0	0	0
LIST THE TYPES OF PROGRAMS SUGGESTED BY COUNSELOR	(38)	(18)	(1)	(13)	(6)
Office	13.2	11.1	0	15.4	16.7
Marketing-sales	5.3	5.6	0	0	16.7
Agriculture	2.6	5.6	0	0	0
Mechanics	5.3	11.1	0	0	0
Engineering	7.9	0	0	23.1	0
Graphic arts	2.6	0	0	7.7	0
Computers	2.6	0	0	0	16.7
Allied health	7.9	11.1	0	7.7	0
Electronics	2.6	5.6	0	0	0
Personal services	2.6	5.6	0	0	0
Building trades	7.9	0	0	7.7	33.3
Industrial trades	23.7	27.8	100.0	15.4	16.7
Professional	2.6	0	0	7.7	0
Trucking	2.6	5.6	0	0	0
Administration-management	7.9	5.6	0	15.4	0
Military-government	2.6	5.6	0	0	0
DID COUNSELOR OFFER APTITUDE TESTS	(53)	(22)	(2)	(18)	(11)
Yes	60.4	68.2	50.0	55.6	54.5
No	39.6	31.8	50.0	44.4	45.5

Questionnaire Items	All Respondents	Geographic Region			
		Piedmont	Pee-Dee	Midlands	Low Country
ENROLLMENT:					
HAVE YOU EVER CHECKED THESE PROGRAMS YOURSELF	(613)	(166)	(98)	(223)	(126)
No	77.2	80.1	75.5	76.7	75.4
Yes	22.8	19.9	24.5	23.3	24.6
IF YES, DID YOU ATTEND	(145)	(35)	(23)	(53)	(34)
Yes	63.4	51.4	73.9	67.9	61.8
No	36.6	48.6	26.1	32.1	38.2
IF DID NOT ATTEND, WHY	(51)	(17)	(6)	(16)	(12)
Academic	5.9	5.9	16.7	6.3	0
Accessibility	9.8	5.9	16.7	18.8	0
No openings	5.9	0	0	12.5	8.3
Other	78.4	88.2	66.7	62.5	91.7
IF OTHER, THEN WHAT	(38)	(14)	(3)	(10)	(11)
No time	26.3	35.7	0	20.0	27.3
Personal problem	42.1	35.7	66.7	50.0	36.4
Did not like courses	26.3	14.3	33.3	30.0	36.4
No money	5.3	14.3	0	0	0
HAVE ANY OF YOUR CHILDREN BEEN ENROLLED IN VOCATIONAL EDUCATION PROGRAM	(378)	(100)	(48)	(151)	(79)
Yes	13.8	15.0	16.7	12.6	12.7
No	86.2	85.0	83.3	87.4	87.3

Questionnaire Items	All Respondents	Geographic Region			
		Piedmont	Pee-Dee	Midlands	Low Country
HAVE THEY BEEN IN A TECHNICAL EDUCATION COLLEGE	(376)	(99)	(48)	(150)	(79)
Yes	17.8	18.2	16.7	14.0	25.3
No	82.2	81.8	83.3	86.0	74.7
HAVE YOU BEEN IN A VOCATIONAL EDUCATION PROGRAM	(605)	(164)	(95)	(221)	(125)
Yes	8.9	7.3	6.3	11.8	8.0
No	91.1	92.7	93.7	88.2	92.0
HAVE YOU BEEN IN A TECHNICAL EDUCATION PROGRAM	(599)	(163)	(93)	(221)	(122)
Yes	13.7	11.0	16.1	13.1	16.4
No	86.3	89.0	83.9	86.9	83.6
HAVE YOU HAD A JOB FOR WHICH YOU WERE VOCATIONALLY OR TECHNICALLY TRAINED	(206)	(56)	(36)	(74)	(40)
No	69.4	85.7	58.3	62.2	70.0
Yes	30.6	14.3	41.7	37.8	30.0
TO WHAT EXTENT DID TRAINING HELP	(65)	(8)	(15)	(29)	(13)
Very great extent	49.2	37.5	40.0	58.6	46.2
Great extent	18.5	37.5	20.0	10.3	23.1
Moderate extent	15.4	25.0	6.7	13.8	23.1
Slight extent	12.3	0	26.7	10.3	7.7
Not at all	4.6	0	6.7	6.9	0

Questionnaire Items	All Respondents	Geographic Region			
		Piedmont	Pee-Dee	Midlands	Low Country
HOW DIFFICULT WAS IT TO FIND A JOB AFTER SCHOOL	(60)	(8)	(15)	(25)	(12)
Very difficult	11.7	0	20.0	12.0	8.3
Fairly difficult	5.0	12.5	6.7	4.0	0
Fairly easy	23.3	25.0	13.3	20.0	41.7
Very easy	60.0	62.5	60.0	64.0	50.0
FACILITIES AND MATERIALS:					
HOW GOOD WERE THE PHYSICAL FACILITIES	(65)	(8)	(15)	(29)	(13)
Very good	75.4	87.5	80.0	79.3	53.8
Acceptable	23.1	12.5	20.0	17.2	46.2
Inadequate	1.5	0	0	3.4	0
PLACEMENT SERVICES:					
DID YOU COMPLETE THE PROGRAM YOU WERE IN	(65)	(8)	(15)	(29)	(13)
Yes	87.7	87.5	80.0	86.2	100.0
No	12.3	12.5	20.0	13.8	0
IF YES, WAS GUIDANCE PROVIDED	(55)	(7)	(11)	(25)	(12)
Yes	56.4	71.4	27.3	64.0	58.3
No	43.6	28.6	72.7	36.0	41.7

Questionnaire Items	All Respondents	Geographic Region			
		Piedmont	Pee-Dee	Midlands	Low Country
WAS GUIDANCE PROVIDED WHEN YOU LEFT	(23)	(3)	(5)	(8)	(7)
Yes	26.1	66.7	0	12.5	42.9
No	73.9	33.3	100.0	87.5	57.1
WERE JOB PLACEMENT SERVICES AVAILABLE	(63)	(8)	(15)	(27)	(13)
Yes	65.1	62.5	60.0	66.7	69.2
No	34.9	37.5	40.0	33.3	30.8
WERE ANY OTHER SERVICES PROVIDED	(61)	(8)	(15)	(25)	(13)
No	83.6	62.5	100.0	88.0	69.2
Yes	16.4	37.5	0	12.0	30.8
SEX BIAS:					
WERE YOU TREATED UNFAIRLY AS A WOMAN	(28)	(6)	(6)	(13)	(3)
No	96.4	83.3	100.0	100.0	100.0
Yes	3.6	16.7	0	0	0
PROGRAM IMPROVEMENT:					
HOW COULD PROGRAM BE IMPROVED	(41)	(9)	(8)	(15)	(9)
More programs for women	4.9	11.1	12.5	0	0
More thorough	31.7	33.3	25.0	46.7	11.1

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Questionnaire Items	All Respondents	Geographic Region			
		Piedmont	Pee-Dee	Midlands	Low Country
HOW COULD PROGRAM BE IMPROVED (continued)					
Better coordination with public system	4.9	0	0	0	22.2
Better job placement	12.2	0	25.0	0	33.3
More of popular courses	14.6	22.2	25.0	6.7	11.1
Better publicity	24.4	22.2	12.5	40.0	11.1
Make it less expensive	7.3	11.1	0	6.7	11.1
HANDICAP:					
DO YOU HAVE A HANDICAP	(613)	(166)	(97)	(222)	(128)
No	85.2	84.3	84.5	85.1	86.7
Yes	14.8	15.7	15.5	14.9	13.3
IF YES, WHAT IS IT	(88)	(23)	(17)	(32)	(16)
Physical disability	13.6	17.4	23.5	6.3	12.5
Sight impairment	8.0	8.7	5.9	9.4	6.3
Hearing loss	3.4	0	5.9	6.3	0
Heart problems	17.0	21.7	11.8	18.8	12.5
Nervous problems	3.4	8.7	0	0	6.3
Other medical	54.5	43.5	52.9	59.4	62.5
DO PHYSICAL BARRIERS PREVENT YOUR ATTENDING A PROGRAM	(82)	(21)	(19)	(28)	(14)
No	69.5	66.7	94.7	53.6	71.4
Yes	30.5	33.3	5.3	46.4	28.6

Questionnaire Items	All Respondents	Geographic Region			
		Piedmont	Pee-Dee	Midlands	Low Country
DID HANDICAP PREVENT YOUR ACCEPTANCE	(82)	(23)	(18)	(28)	(13)
No	75.6	73.9	88.9	60.7	92.3
Yes	24.4	26.1	11.1	39.3	7.7
VALUE OF PROGRAMS:					
HOW VALUABLE ARE VOCATIONAL/TECHNICAL PROGRAMS	(600)	(161)	(95)	(218)	(126)
Very valuable	76.5	77.0	68.4	85.8	65.9
Pretty valuable	20.5	19.3	31.6	11.9	28.6
Not very valuable	2.0	2.5	0	1.8	3.2
Not valuable at all	1.0	1.2	0	.5	2.4